

# SERVICE MANUAL

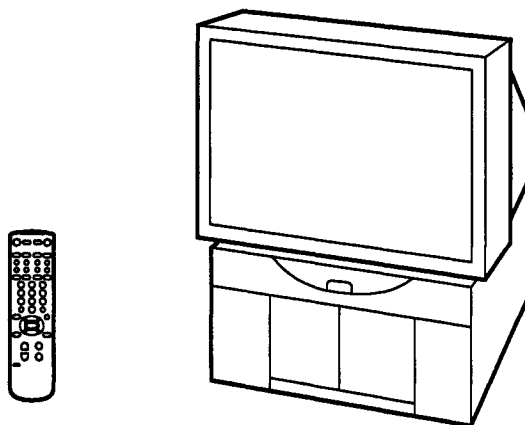
# RA-1 CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>	<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
KP-46V35	RM-Y137	US	SCC-H53M-A				
KP-53V35	RM-Y137	US	SCC-H53N-A				
KP-53V35	RM-Y137	Canadian	SCC-H58L-A				
KP-61V35	RM-Y137	US	SCC-H53P-A				

**Note :**

1. Adjustment Manual for this model is separately published.

	Adjustment Manual
Part No.	9-965-106-01



※ Please file according to model size. ....

46 53 61

COLOR REAR VIDEO PROJECTOR  
**SONY®**

# Specifications

<b>Projection system</b>	3 picture tubes, 3 lenses, horizontal in-line system
<b>Picture tube</b>	7 inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquidcooling system
<b>Projection lenses</b>	High performance, large-diameter hybrid lens F1.0
<b>Screen size (measured diagonally)</b>	
	KP-46V35 46 inches
	KP-53V35 53 inches
	KP-61V35 61 inches
<b>Screen brightness</b>	
	KP-46V35 1500 cd/m <sup>2</sup>
	KP-53V35 1200 cd/m <sup>2</sup>
	KP-61V35 1000 cd/m <sup>2</sup>
<b>Television system</b>	American TV standards
<b>Channel coverage</b>	VHF: 2-13/UHF: 14-69/CATV: 1-125
<b>Antenna</b>	75 ohm external antenna terminal for VHF/UHF
<b>Inputs/output</b>	VIDEO IN 1 S VIDEO IN (4-pin mini DIN): Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal), 75 ohms VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync negative AUDIO (phono jacks): 500 mVrms (100% modulation) Impedance : 47 kilohms VIDEO INPUT 2 and VIDEO IN 3 VIDEO (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative AUDIO (phono jacks): 500 mVrms (100% modulation) Impedance: 47 kilohms

<b>VIDEO OUT 3</b>	VIDEO (phono jack): 1 Vp-p, 75 ohms unbalanced, sync negative
<b>AUDIO (phono jack):</b>	500 mVrms (100% modulation), Impedance: 10 kilohms
<b>MONITOR OUT</b>	VIDEO (phono jack): 1 Vp-p, 75 ohms unbalanced, sync negative
<b>AUDIO (phono jacks):</b>	500 mVrms (100% modulation), Impedance: 10 kilohms
<b>AUDIO (VAR/FIX) OUT (phono jacks):</b>	900 mVrms (100% modulation) Impedance: 5 kilohms
<b>Speaker</b>	Full range speaker: 100 mm (3.9 inches) Subwoofer speaker: 130 mm (5.1 inches)
<b>Speaker output</b>	Front: 15 W x 2 Subwoofer: 40 W x 1
<b>Power requirement</b>	120 V, 60 Hz
<b>Power consumption</b>	Max. 330 W

Standby mode: 4 W

	Dimensions (W/H/D)	Mass
KP-46V35	1,066 x 1,336 x 698 mm (42 x 52 <sup>3</sup> / <sub>8</sub> x 27 <sup>1</sup> / <sub>2</sub> inches)	88 kg (193 lbs 10 oz)
KP-53V35	1,218 x 1,442 x 698 mm (48 x 56 <sup>3</sup> / <sub>4</sub> x 27 <sup>1</sup> / <sub>2</sub> inches)	94 kg (207 lbs 1 oz)
KP-61V35	1,338 x 1,619 x 774 mm (52 <sup>3</sup> / <sub>4</sub> x 63 <sup>3</sup> / <sub>4</sub> x 30 <sup>1</sup> / <sub>2</sub> inches)	146 kg (321 lbs 7 oz)

<b>Supplied accessories</b>	Remote commander RM-Y137 (1) Size AA (R6) battery (2)
<b>Optional accessories</b>	U/V mixer EAC-66 Connecting cables RK-74A, VMC-810S/820S, YC-15V/30V, VMC-720M High-contrast protective screen SCN-46X1 (For KP-46V35) SCN-53X1 (For KP-53V35)

Design and specifications are subject to change without notice.

## SAFETY CHECK-OUT (US Model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the metal trim, metallized knobs, screws, and all other exposed metal parts for AC leakage.  
Check leakage as described below.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufactures' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

### HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

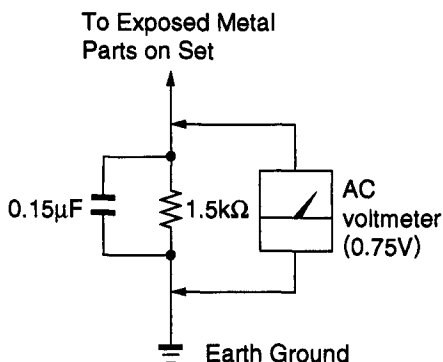


Fig. A. Using an AC voltmeter to check AC leakage.

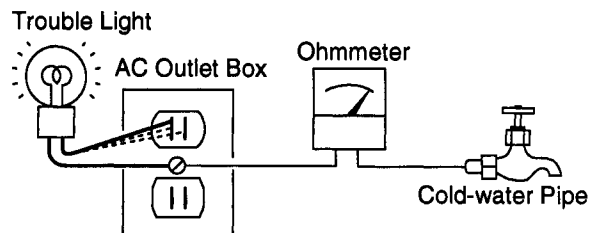


Fig. B. Checking for earth ground.

# TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
<b>1. GENERAL</b>			<b>4. DIAGRAMS</b>		
Step 1 : Installing the projection TV .....		5	4-1. Block Diagrams (1) .....		26
Step 2 : Connections .....		5	Block Diagrams (2) .....		29
Step 4 : Setting up the projection TV automatically (AUTO SET UP) .....		9	Block Diagrams (3) .....		32
Setting the clock (CURRENT TIME SET) .....		12	Block Diagrams (4) .....		35
Setting the timer to turn the projection TV on and off (ON/OFF TIMER) .....		12	4-2. Circuit Boards Location .....		38
Blocking out a channel (CHANNEL BLOCK) .....		13	4-3. Printed Wiring Boards and Schematic Diagrams ....		38
Customizing the channel names (CH CAPTION) .....		13	• A Board .....		39
Setting video labels (VIDEO LABEL) .....		14	• D Board .....		45
Displaying Caption Vision (CAPTION VISION) .....		14	• U Board .....		51
Operating a cable box or DBS receiver .....		15	• M Board .....		57
			• P Board .....		63
			• HA Board .....		70
			• E Board .....		71
<b>2. DISASSEMBLY</b>			• G Board .....		77
2-1-1. Rear Plate Removal (KP-46V35/53V35) .....		16	• ZB Board .....		82
2-1-2. Rear Plate Removal (KP-61V35) .....		16	• HB Board .....		82
2-2. Chassis Assy Removal .....		16	• ZG Board .....		83
2-3. Service Position .....		16	• ZR Board .....		84
2-4. G Board Removal .....		17	• K Board .....		87
2-5. D Board Removal .....		17	• MB Board .....		87
2-6. U Board Removal .....		17	• CR Board .....		93
2-7. M Board Removal .....		17	• CG Board .....		94
2-8. HA Board Removal .....		18	• CB Board .....		95
2-9-1. Beznet Removal (KP-46V35/53V35) .....		18	4-4. Semiconductors .....		99
2-9-2. Screen Frame Removal (KP-61V35) .....		18			
2-10-1. Mirror Cover Removal (KP-46V35/53V35) .....		18	<b>5. EXPLODED VIEWS</b>		
2-10-2. Mirror Cover Removal (KP-61V35) .....		19	5-1. Cover (KP-46V35/53V35) .....		101
2-11. High-Voltage Cable Installation and Removal .....		19	5-2. Cover (KP-61V35) .....		102
2-12. Picture Tube Removal .....		19	5-3. Chassis .....		103
2-13. K Board Removal .....		19	5-4. Picture Tube .....		104
<b>3. SAFETY RELATED ADJUSTMENTS</b> .....		20	<b>6. ELECTRICAL PARTS LIST</b> .....		105

## (CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

## WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.  
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

## SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  $\Delta$  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

## (ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

## ATTENTION!!

AFIN D'EVITER TOUT RESQUE D'ELECTROCUTION PROVENANT D'UN CHASSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISE LORS DE TOUT DEPANNAGE. LE CHASSIS DE CE RECEPTEUR EST DIRECTEMENT RACCORDE A L'ALIMENTATION SECTEUR.

## ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MARQUE  $\Delta$  SUR LES SCHEMAS DE PRINCIPE, LES VUES EXPLOSEES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMERO DE PIECE EST INDIQUE DANS LE PRESENT MANUEL OU DANS DES SUPPLEMENTS PUBLIES PAR SONY. LES REGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRESENT MANUEL. SUIVRE CES PROCEDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTE.



## SECTION 1 GENERAL

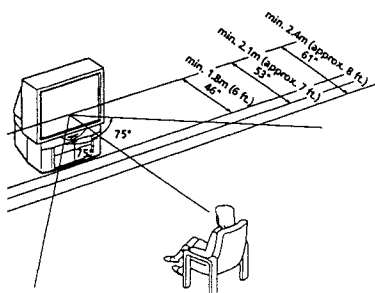
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

### Getting Started

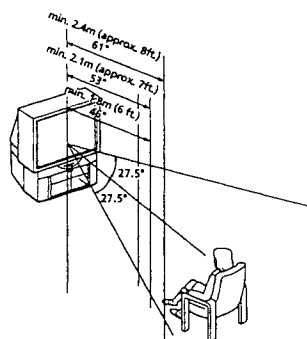
## Step 1: Installing the projection TV

For the best picture quality, install the projection TV within the areas shown below.

### Optimum viewing area (Horizontal)



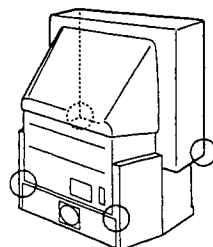
### Optimum viewing area (Vertical)



### Carrying your projection TV

Be sure to grasp the portions indicated when carrying the projection TV, and to use more than two people.

(Rear of projection TV)



### Preparing your projection TV

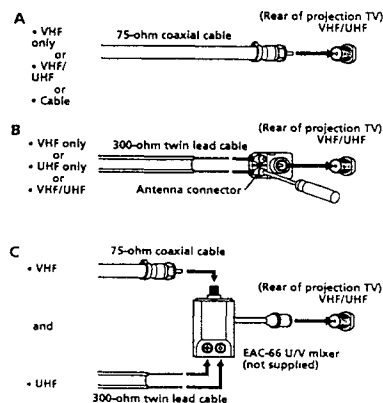
Before you use your projection TV, adjust convergence. For the procedure, see "Step 4: Setting up the projection TV automatically (AUTO SET UP)" on page 15.

## Step 2: Connections

Although you can use either an indoor antenna or outdoor antenna with your projection TV, we recommend connecting to an outdoor antenna or a cable TV system for improved picture quality.

### To an antenna

Connect your antenna cable to the VHF/UHF antenna terminal. If you cannot connect your antenna cable directly to the terminal, follow one of the instructions below depending on your cable type.

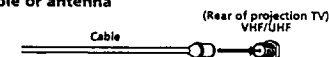


#### Notes

- Most VHF/UHF combination antennas have a signal splitter. Remove the splitter before attaching the appropriate connector.
- If you use the U/V mixer, snow and noise may appear in the picture when viewing cable TV channels over 37.

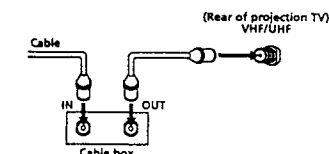
### Connecting an antenna/cable TV system without a VCR

#### To cable or antenna

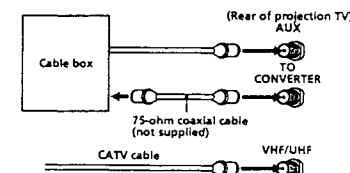


#### To cable box

If your cable company requires you to connect a cable box, make the connection as follows:



#### To cable box and cable



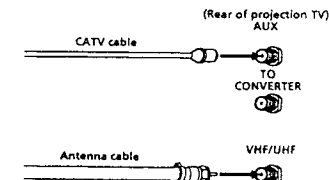
Pay cable TV systems use scrambled or encoded signals requiring the cable box\* in addition to the normal cable connection.

\* The cable box will be supplied by the cable company.

#### Note

- You cannot watch the signal through AUX connector as a window picture.

#### To cable and antenna



#### Note

- Do not connect anything to the TO CONVERTER connector in this case.

## Connecting an antenna/cable TV system with a VCR

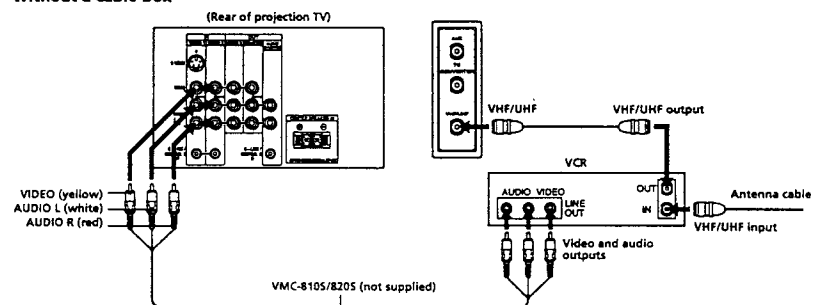
For details on connection, see the instruction manual of your VCR. Before connecting, disconnect the AC power cords of the equipment to be connected.

After making these connections, you will be able to do the following:

- View the playback of video tapes
- Record one TV program while viewing another program

### To a conventional VCR

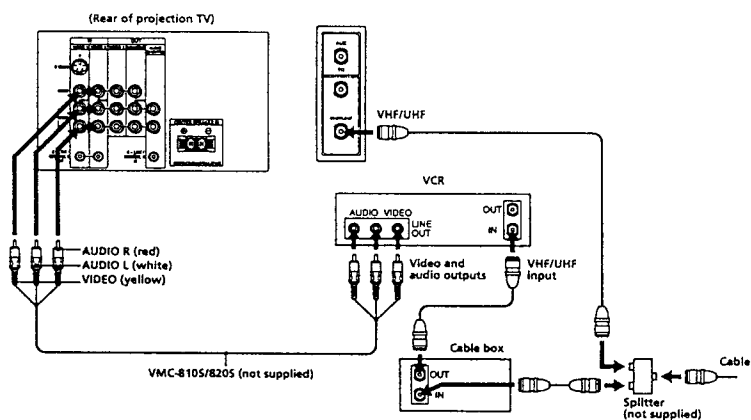
#### Without a cable box



#### Note

- To connect a monaural VCR, connect the audio output of the VCR to AUDIO L (MONO) of VIDEO 1/3 IN on the projection TV.
- Do not connect the cable to the S VIDEO connector on the projection TV.

#### With a cable box



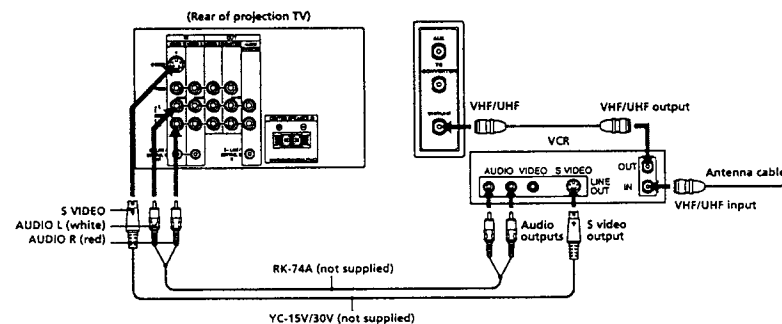
Getting Started 7-EN

### To an S video equipped VCR

If your VCR has an S video output jack, make the connection as follows.

Whenever you connect the cable to the S VIDEO connector, the projection TV automatically receives S video signals.

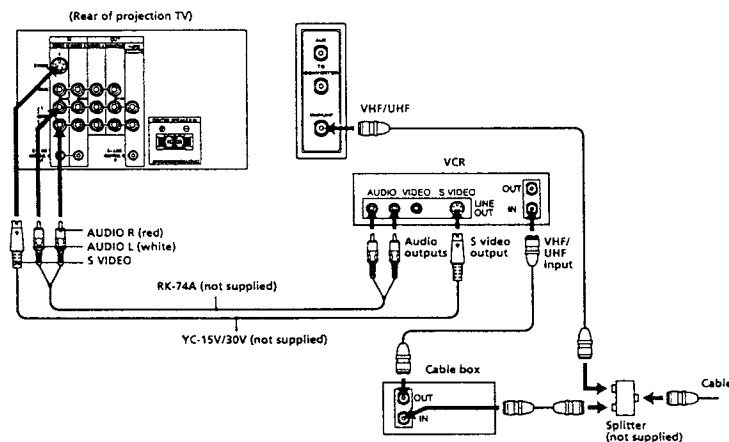
#### Without a cable box



#### Note

- Video signals are composed of Y (luminance) and C (chroma) signals. The S connection sends the two signals separately preventing degradation, and gives better picture quality compared to conventional connection.

#### With a cable box

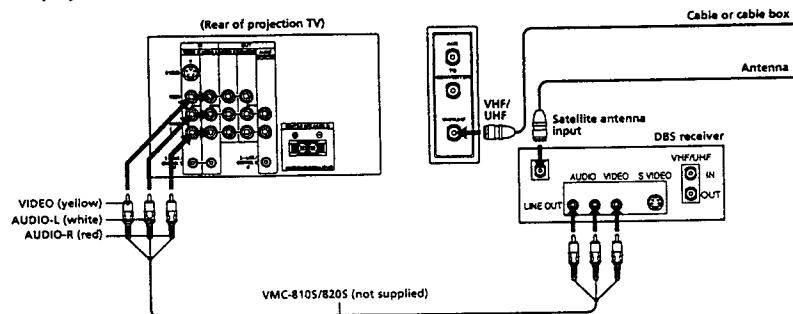


8-EN Getting Started

## Connecting a DBS receiver

For connection details, see the instruction manual of the DBS (Digital Broadcasting Satellites) receiver.

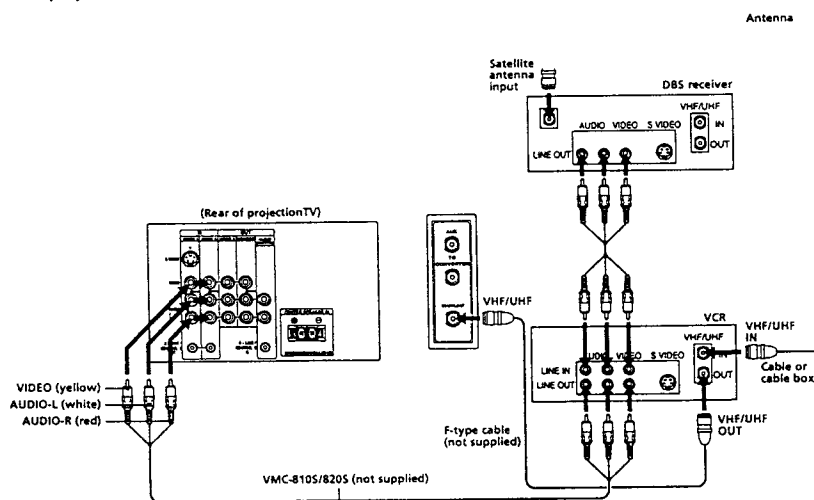
### To a projection TV



#### Note

- You can use the S VIDEO jack or the composite video jack for the video connection.

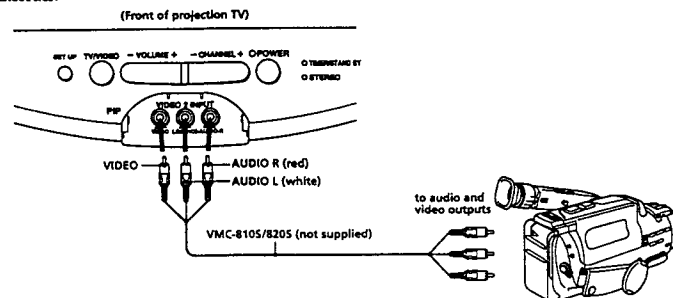
### To a projection TV and VCR



Getting Started 9-EN

## Connecting a camcorder

This connection is convenient for watching the picture from a camcorder.



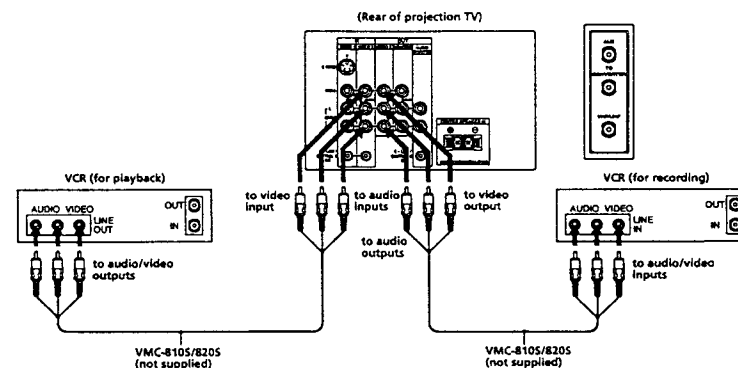
#### Note

- To connect a monaural camcorder, connect the audio output of the camcorder to AUDIO L (MONO) of VIDEO 2 INPUT on the projection TV.

## Connecting two VCRs for tape editing using VIDEO 3 IN and OUT

You can watch input images different from the image being recorded.

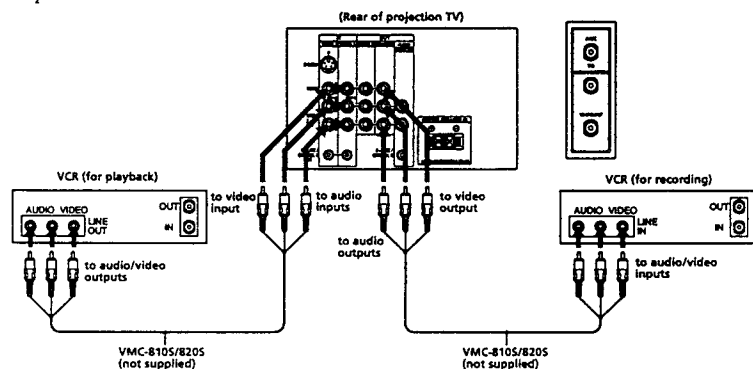
The VIDEO 3 OUT jacks output only the signal from the VIDEO 3 IN jacks. If you make the connection as shown below, you can watch images from either antenna, cable, VIDEO 1 IN or VIDEO 2 INPUT jacks during recording.



10-EN Getting Started

## Connecting two VCRs for tape editing using MONITOR OUT

You can record input images displayed on the screen. This type of connection should be used only when you connect from the line input of one VCR, and from the line output of a second VCR.

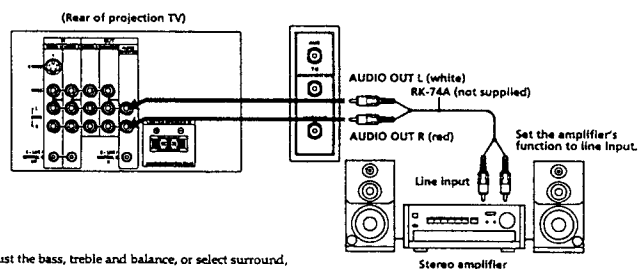


### Notes

- Do not change the input signal while editing through MONITOR OUT, or the output signal will also change.
- When connecting a single VCR to the projection TV, do not connect MONITOR OUT to the VCR's line input, while at the same time connecting from the projection TV's VIDEO IN jacks to the VCR's line output.
- You can use the S VIDEO connector to connect a VCR for playback and either S VIDEO connector or composite video jack to connect a VCR for recording.

## Connecting an audio system

When connecting audio equipment, see page 29 for more information.



### Note

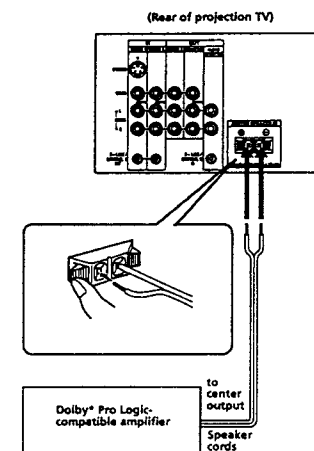
- You can adjust the bass, treble and balance, or select surround, an MTS (Multichannel TV Sound) or OSE (Orchestra Seat Effect) mode with the supplied remote commander.

## Using the projection TV speakers as center speakers

This feature allows you to enjoy the benefits of Dolby Pro Logic by using the speakers of the projection TV as the center speaker. To utilize this system, you must connect an amplifier that is Dolby Pro Logic compatible. Connect the speaker wires from the amplifier's center channel output terminals to the projection TV's CENTER SPEAKER IN. Both right and left terminals must be connected to receive an audio signal. After making the right connections, select "SPEAKER: CENTER" in the AUDIO menu (page 29). The left and right audio channels can be heard through your audio system speakers. In this connection, adjust the volume with your amplifier.

### Notes

- Always match the speaker cord and terminal colors when making the connections.
- Unplug the projection TV when making the connections. If the exposed speaker cord wires touch while the projection TV is plugged in, the projection TV may short-circuit and be damaged.
- Do not pull on the speaker cords.
- Always turn off the amplifier power before connecting to the CENTER SPEAKER IN terminals.
- When using the projection TV speakers as center speakers, the subwoofer is disabled.



- Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,959,590, Canadian numbers 1,004,603 and 1,037,877. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

## Using the S-Link function with S-Link capable Sony VCRs

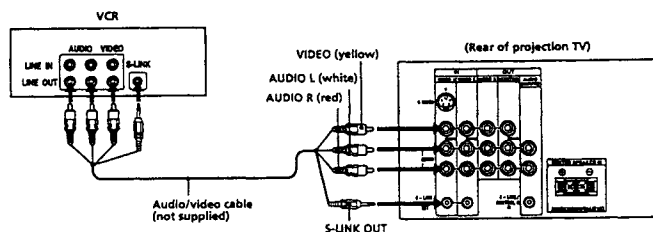
The S-Link feature allows you to operate the projection TV and VCR with the S-Link function in the following ways:

- When you press the VCR's play button, the projection TV's input mode is automatically changed to video input which is connected, and the VCR starts playing a tape.

- You can turn off the projection TV and VCR together using the SYSTEM OFF button (see page 38 for details).

### Notes

- The projection TV may malfunction if you connect the S-Link cable to the projection TV without connecting the other end of the cable to the VCR.
- When making the S-Link connection, be sure to insert all the connectors firmly.
- The same terminals are used for both S-Link and CONTROL S.



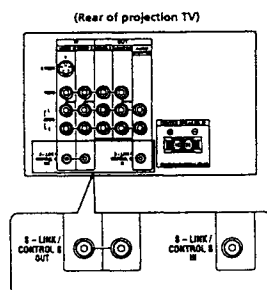
## Connecting other Sony equipment with CONTROL S jack

This feature allows you to control your projection TV and other Sony equipment with one remote commander.

- To control other Sony equipment with the projection TV's remote commander, connect the input of the equipment to CONTROL S OUT jack on the projection TV.
- To control the projection TV with the remote commander of other Sony equipment, connect the output of the equipment to CONTROL S IN jack on the projection TV.

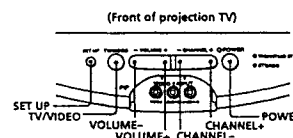
### Note

- The same terminals are used for both S-Link and CONTROL S.



## Step 4: Setting up the projection TV automatically (AUTO SET UP)

You can set up your projection TV easily by using AUTO SET UP feature. It presets all the receivable channels, adjusts the convergence and changes the on-screen menu language. To set up the projection TV manually, see "Adjusting convergence" (page 17), "Setting cable TV on or off" (page 18), "Presetting channels" (page 19) and "Changing the menu language" (page 19). If the TV is set to a video input, you cannot execute AUTO SET UP. Press TV/VIDEO so that a channel number appears.

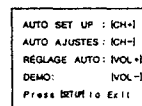


### 1 Press POWER to turn the projection TV on.



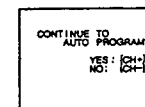
### 2 Press SET UP on the front of the projection TV.

The AUTO SET UP screen appears.



### 3 Press CHANNEL+ to start AUTO SET UP.

If you prefer Spanish or French to English, you can change the on-screen menu language. Press CHANNEL- for Spanish or VOLUME+ for French.

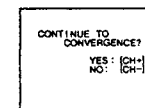


All of the menus will be set to the factory preset condition in the selected language.

### 4 Press CHANNEL+ to preset channels.

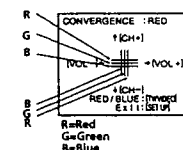


"AUTO PROGRAM" appears on the screen and the projection TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the following menu appears. If the projection TV receives cable TV channels, CATV is set to ON automatically.



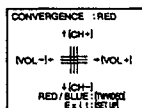
### 5 Adjust convergence.

- Press CHANNEL+.
- The CONVERGENCE adjustment screen appears.

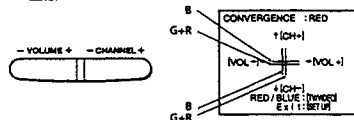


(continued)

(2) Press TV/VIDEO to select RED or BLUE.

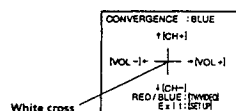


(3) Using CHANNEL +/- or VOLUME +/-, move the line until it converges with the center green line.



To move horizontal line up/down, press CHANNEL +/-.  
To move vertical line right/left, press VOLUME +/-.

(4) Repeat steps (2) and (3) to adjust the other lines until all three lines converge and are seen as a white cross.



#### Notes

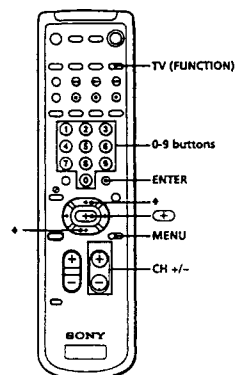
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.
- In case of using the AUX connector, press TV (black button) on the remote commander first and make sure that "AUX" is displayed beside the channel number on the screen. Then follow steps 2 to 5 above to perform AUTO SET UP.

#### To preview the main functions (DEMO)

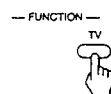
Press VOLUME- in step 3. The functions and menus are displayed one by one. To exit DEMO, press any button.

### Erasing or adding channels

After AUTO SET UP you can erase unnecessary channels or add the channels you want. Preset channels during the day rather than late at night, when some channels may not be broadcasting.



1 Press TV (FUNCTION).



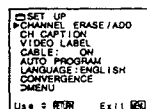
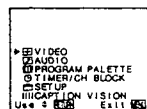
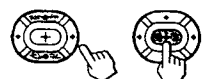
2 Press MENU.

The main menu appears.



3 Press + or - to move the cursor (P) to SET UP and press .

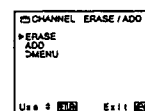
The SET UP menu appears.



4 Make sure the cursor (P) is beside CHANNEL ERASE/ADD and press .

If the cursor is not beside CHANNEL ERASE/ADD, press + or - to move the cursor and press .

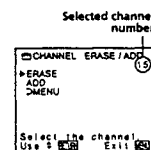
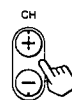
The CHANNEL ERASE/ADD menu appears.



5 Erase and/or add the channel you want:

To erase an unwanted channel

- Make sure the cursor (P) is beside ERASE.
- Press CH + or - to select the channel you want to erase.



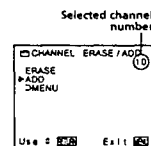
(3) Press .

The "-" indication appears beside the channel number, showing that the channel is erased from the preset memory.



To add a channel that you want

- Press + or - to select ADD.
- Press 0-9 button to select the channel you want to add, and press ENTER.



(3) Press .

The "+" indication appears beside the channel number, showing that the channel is added to the preset memory.



6 To erase and/or add other channels, repeat step 5.

7 When you finish, press MENU.



#### Notes

- If you erase or add a VHF or UHF channel, the cable TV channel with the same number is also erased or added, and vice versa.
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.
- Erasing and adding channels are also available for the AUX input.

### Adjusting convergence (CONVERGENCE)

The projection tube image appears on the screen in three layers (red, green and blue). If they do not converge, the color is poor and the picture blurs. To correct this, adjust convergence.

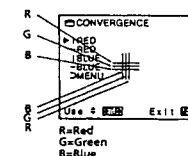
You do not have to do this procedure if you execute AUTO SET UP (page 15). Do this procedure only when you want to adjust it manually.

1 Press MENU.

2 Press + or - to move the cursor (P) to SET UP and press .

3 Press + or - to move the cursor (P) to CONVERGENCE and press RETURN.

The CONVERGENCE adjustment screen appears.

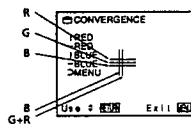


- 4 Press + or + to move the cursor (P) to the symbol showing the line you want to adjust, and press (D).



- | RED: Red vertical line (left/right adjustment)
- RED: Red horizontal line (up/down adjustment)
- | BLUE: Blue vertical line (left/right adjustment)
- BLUE: Blue horizontal line (up/down adjustment)

- 5 Press + or + to move the line until it converges with the center green line, and press (D).



To move up/right, press +.  
To move down/left, press +.

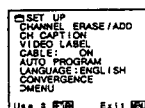
- 6 Repeat steps 4 and 5 to adjust the other lines until all three lines converge and are seen as a white cross.
- 7 Press MENU to return to the original screen.

## Setting cable TV on or off

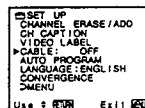
If you have connected the projection TV to a cable TV system, set CABLE to ON, the factory setting. If not, set CABLE to OFF.

You do not have to do this procedure if you execute AUTO SET UP (page 15). Do this procedure only when you want to set it manually.

- 1 Press MENU.
- 2 Press + or + to move the cursor (P) to SET UP and press (D).
- 3 Press + or + to move the cursor (P) to CABLE and press (D).



- 4 Press + or + to select ON or OFF and press (D).



- 5 Press MENU to return to the original screen.

### Note

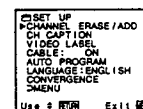
- If CABLE appears in black, the projection TV is set to a video input and you cannot select CABLE. Press TV (black) so that a channel number appears.

## Presetting channels

You can preset TV channels easily by AUTO PROGRAM feature.

You do not have to do this procedure if you execute AUTO SET UP (page 15). Do this procedure only when you want to set it manually.

- 1 Press MENU.
- 2 Press + or + to move the cursor (P) to SET UP and press (D).



- 3 Press + or + to move the cursor (P) to AUTO PROGRAM and press (D).



"AUTO PROGRAM" appears on the screen and the projection TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the lowest numbered channel is displayed.

- 4 Press MENU to return to the original screen.

### Notes

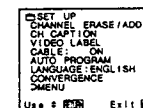
- If AUTO PROGRAM appears in black in the SET UP menu, the projection TV is set to a video input and you cannot select AUTO PROGRAM. Press TV (black) so that a channel number appears.
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.
- Presetting channels is also available for the AUX input.

## Changing the menu language

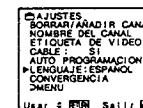
If you prefer Spanish or French to English, you can change the menu language.

You do not have to do this procedure if you execute AUTO SET UP (page 15). Do this procedure only when you want to set it manually.

- 1 Press MENU.
- 2 Press + or + to move the cursor (P) to SET UP and press (D).
- 3 Press + or + to move the cursor (P) to LANGUAGE and press (D).



- 4 Press + or + to select the language and press (D).
- The menu in selected language appears.



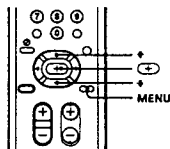
- 5 Press MENU to return to the original screen.

### Note

- Even when you select Spanish or French language, certain parts of the menus remain in English.

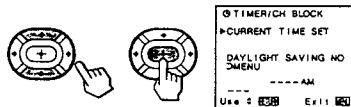
## Setting the clock (CURRENT TIME SET)

Set the current time before using On/off Timer (page 32) and Channel Block features (page 33). For example, set the clock to 3:15 P.M., Monday.



1 Press MENU.

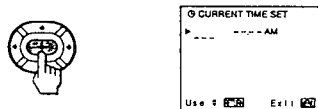
2 Press  $\uparrow$  or  $\downarrow$  to select TIMER/CH BLOCK and press  $\rightarrow$ .



If you need to set DAYLIGHT SAVING, follow the procedure on the previous page.

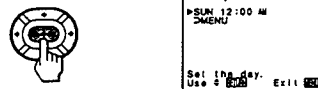
3 Make sure the cursor ( $\blacktriangleright$ ) is beside CURRENT TIME SET, and press  $\rightarrow$ .

If the cursor is not beside CURRENT TIME SET, press  $\uparrow$  or  $\downarrow$  to move the cursor and press  $\rightarrow$ .

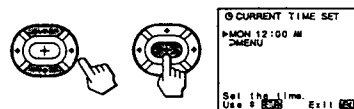


4 Set the current time.

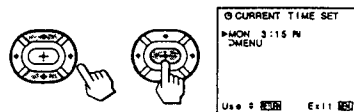
(1) Press  $\rightarrow$  to start setting the time.



(2) Press  $\uparrow$  or  $\downarrow$  to set the day and press  $\rightarrow$ .



(3) Using  $\uparrow$  or  $\downarrow$  and  $\rightarrow$ , set hour and minute in the same way as in step (2). When you press  $\rightarrow$  after setting the minute, the clock starts.



If you make a mistake while setting the time Press RESET while the CURRENT TIME SET menu is displayed, then repeat step 4.

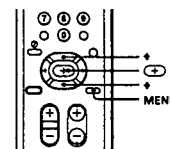
To display the current time Press DISPLAY.

### Note

- If you unplug the projection TV or a power interruption occurs, the clock will be erased. Reset the current time.

## Setting the timer to turn the projection TV on and off (ON/OFF TIMER)

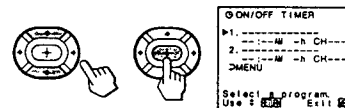
You can set the projection TV to turn on and off at the time you specify. Make sure the clock is set correctly. If it is not, set the clock first (page 31).



1 Press MENU.

2 Press  $\uparrow$  or  $\downarrow$  to select TIMER/CH BLOCK and press  $\rightarrow$ .

3 Press  $\uparrow$  or  $\downarrow$  to select ON/OFF TIMER and press  $\rightarrow$ .

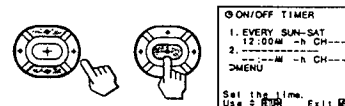


4 Enter the ON/OFF TIMER setting.

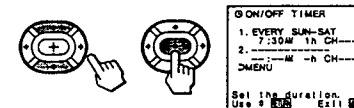
(1) Press  $\uparrow$  or  $\downarrow$  to select program 1 or 2 and press  $\rightarrow$ .

(2) Press  $\uparrow$  or  $\downarrow$  to set the days and press  $\rightarrow$ .

Each time you press  $\uparrow$  or  $\downarrow$ , the days cycle as shown below.  
EVERY SUN-SAT  $\rightarrow$  EVERY MON-FRI  $\rightarrow$   
SUNDAY  $\rightarrow$  MONDAY  $\rightarrow$  ...  $\rightarrow$  SATURDAY  $\rightarrow$   
EVERY SUNDAY  $\rightarrow$  EVERY MONDAY  $\rightarrow$   
...  $\rightarrow$  EVERY SATURDAY

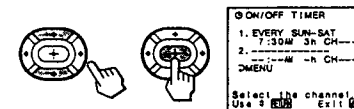


(3) Press  $\uparrow$  or  $\downarrow$  to set the time (hour then minute) that you want to turn on the projection TV and press  $\rightarrow$ .

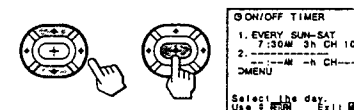


(4) Press  $\uparrow$  or  $\downarrow$  to set the hour duration and press  $\rightarrow$ .

You can set the hour duration by one hour up to a maximum of six hours.



(5) Press  $\uparrow$  or  $\downarrow$  to select the channel and press  $\rightarrow$ .



The TIMER/STAND BY indicator on the projection TV lights.

5 To set the other program, press  $\rightarrow$  and repeat step 4.

One minute before the projection TV switches to turn off, a message "TV will turn off." is displayed on the screen.

### To cancel the timer

Press RESET on the remote commander.

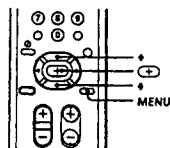
### Note

- If you unplug the projection TV or a power interruption occurs, ON/OFF TIMER settings will be erased. Reset the current time, then set the timer.

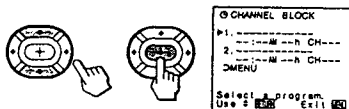


## Blocking out a channel (CHANNEL BLOCK)

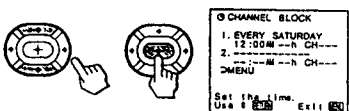
This feature allows you to prevent children from watching unsuitable programs. Make sure the clock is set correctly. If it is not, set the clock first (page 31).



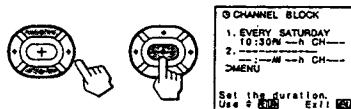
- 1 Press MENU.
- 2 Press + or + to select TIMER/CH BLOCK and press +.
- 3 Press + or + to select CHANNEL BLOCK and press +.



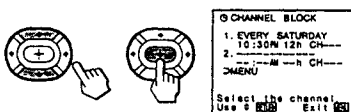
- 4 Enter a CHANNEL BLOCK setting.
  - (1) Press + or + to select program 1 or 2 and press +.
  - (2) Press + or + to set the days and press +. Each time you press + or +, the days cycle as shown below.  
EVERY SUN-SAT → EVERY MON-FRI → SUNDAY → MONDAY → ... → SATURDAY → EVERY SUNDAY → EVERY MONDAY → ... → EVERY SATURDAY



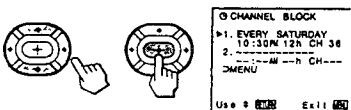
- (3) Press + or + to set the time (hour then minute) that you want to start blocking the channel and press +.



- (4) Press + or + to select the hour duration you want to block and press +. Each time you press +, the hour duration increases by one hour up to a maximum of 12 hours.



- (5) Press + or + to select the channel and press +.



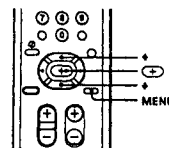
If you select the blocked channel during the time you set, the message "BLOCKED" appears and the picture is blocked and the sound is muted.

**To cancel a CHANNEL BLOCK setting**  
Press RESET on the remote commander.

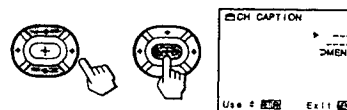
**Note**  
• If the CHANNEL BLOCK and ON/OFF TIMER settings are overlapped, the later time setting has priority over the other setting.

## Customizing the channel names (CH CAPTION)

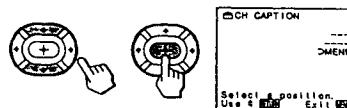
You can add a caption for up to 20 channels. This feature allows you to easily identify which channel you are watching. You can make your own caption.



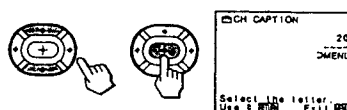
- 1 Press MENU.
- 2 Press + or + to select SET UP and press +.
- 3 Press + or + to select CH CAPTION and press +.



- 4 Press + again.



- 5 Press + or + to select the channel that you want to caption and press +.



- 6 Enter the letters (up to four) to caption the channel:

- (1) Press + or + to select the first letter.

Each time you press + or +, the letter changes as follows:

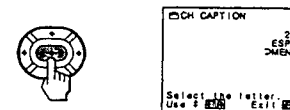
0 → 1 → 2 → 3 → 4 → 5 → 6 → 7 → 8 → 9 → A → B → C → D → E → F → G → H → I → J → K → L → M → N → O → P → Q → R → S → T → U → V → W → X → Y → Z → (blank space)



- (2) Press +.



- (3) Repeat steps (1) and (2) to select the remaining letters and press +.



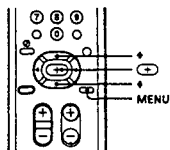
- 7 Repeat steps 4 to 6 to caption other channels.

**To erase a caption**  
Press RESET after step 4.

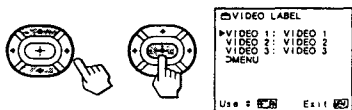
**Notes**  
• If the CH CAPTION menu appears in black, the projection TV is set to a video input, and you cannot select CH CAPTION. Press TV (black button) so that a channel number appears.  
• If more than 90 seconds elapse after you press a button, the menu disappears automatically.  
• The channel caption feature is not available for the AUX input.

## Setting video labels (VIDEO LABEL)

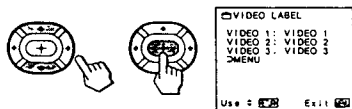
This feature allows you to label each input mode so that you can easily identify the connected equipment. For example, you can label VIDEO 1 IN as VHS.



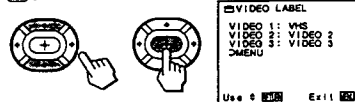
- 1 Press MENU.
- 2 Press + or + to select SET UP and press .
- 3 Press + or + to select VIDEO LABEL and press .



- 4 Press + or + to select the input mode you want to label and press .



- 5 Press + or + to select the label and press .



Each time you press + or +, the label changes as shown below.

VIDEO 1  
VIDEO 1 → S-VIDEO → BETA → 8mm → VHS → LD → DBS

VIDEO 2  
VIDEO 2 → BETA → 8mm → VHS → LD → DBS

VIDEO 3  
VIDEO 3 → BETA → 8mm → VHS → LD → DBS

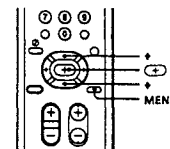
- 6 Repeat steps 4 and 5 to label other input modes.

### Note

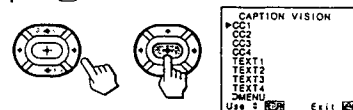
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.

## Displaying Caption Vision (CAPTION VISION)

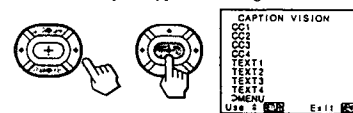
Some programs are broadcast with Caption Vision. To display Caption Vision, select either CC1, CC2, CC3, CC4, TEXT1, TEXT2, TEXT3 or TEXT4 from the menu. CC1, CC2, CC3 or CC4 shows you a caption, that is a printed version of the dialog or sound effects of a program. (The mode should be set to CC1 for most programs.) TEXT1, TEXT2, TEXT3 or TEXT4 shows you text, that is information presented using either half or the whole screen. It is not usually related to the program.



- 1 Press MENU.
- 2 Press + or + to select CAPTION VISION and press .



- 3 Press + or + to select the caption type and press .  
The selected caption type is colored green.



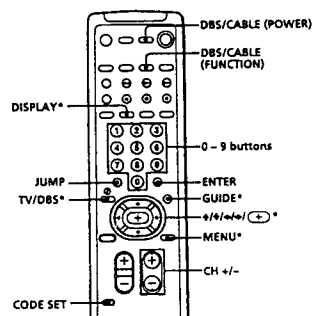
To display Caption Vision  
Press DISPLAY. (See page 21 for details.)

### Notes

- Poor reception of TV programs can cause errors in Caption Vision and XDS.
- Captions may appear with a white box or other errors instead of a certain word.
- XDS, Caption Vision, and the status display cannot be used at the same time.
- For details on XDS, see page 21.

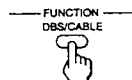
## Operating a cable box or DBS receiver

You can program the supplied remote commander to operate a cable box or DBS receiver. Follow the procedures below to set the manufacturer's code number in the remote commander.

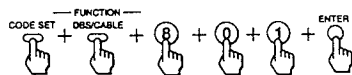


\* The TV/DBS, GUIDE, DISPLAY, +/-, +/-, +/-, +/- and MENU buttons can be used only with a DBS receiver.

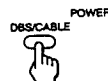
- 1 Turn off the equipment you want to set up, and press DBS/CABLE (FUNCTION).



- 2 Press the CODE SET, DBS/CABLE (FUNCTION), and 0-9 buttons to enter the manufacturer's code number (see the chart), then press ENTER. For example, to program your remote commander to operate a Sony DBS receiver, press CODE SET, DBS/CABLE (FUNCTION), 8, 0, 1, and ENTER.



- 3 Press DBS/CABLE (POWER) to turn on the cable box or DBS receiver.



- 4 Use the cable box/DBS control buttons to check if the code number works. For example, to operate a cable box or DBS receiver, you can use the DBS/CABLE (POWER), JUMP, CH +/-, 0-9 and ENTER buttons.

### Note

- If the cable box or DBS receiver does not have a certain function, the corresponding button on this remote commander will not operate.

### To operate the projection TV

Press TV (FUNCTION). Then use the projection TV control buttons to control the projection TV.

### For more details on operating the cable box or DBS receiver

Refer to the operating instructions that come with the equipment.

### If the remote commander doesn't work

- First, try repeating the setup procedures using the other codes listed for your equipment.

### Manufacturer code numbers (cable box)

Manufacturer	Code number
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/G. I.	201, 202, 203, 204, 205, 206, 207, 208, 218
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

### Manufacturer code numbers (DBS receiver)

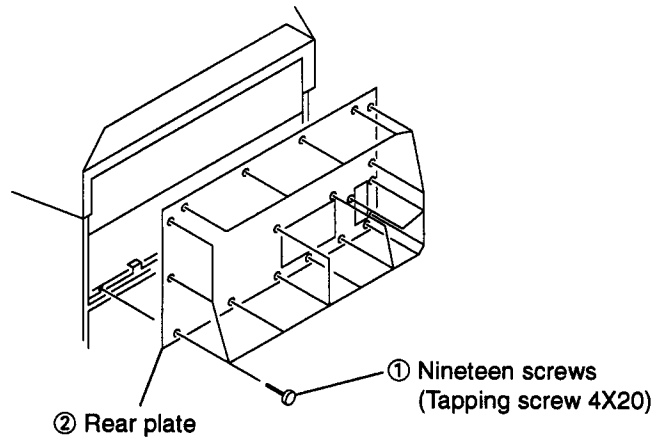
Manufacturer	Code number
Sony	801 (preset code for the supplied remote commander)
RCA	802

### Notes

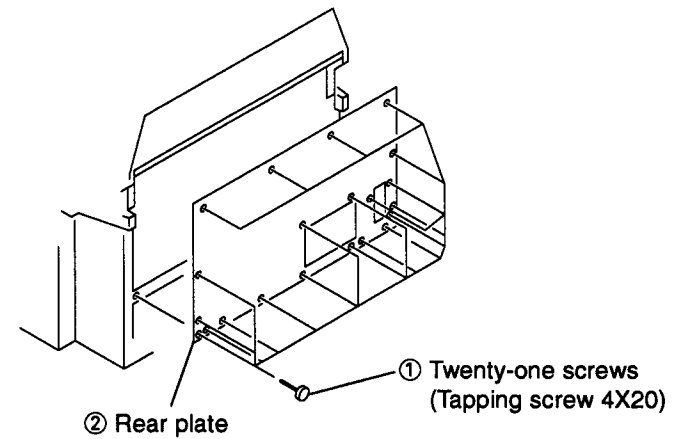
- If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.
- If you enter a new code number, the code number you previously entered at that setting is erased.
- In some rare cases, your equipment may use a code that is not provided with this remote commander and you may not be able to operate your equipment with the supplied remote commander. In this case, use the equipment's own remote control unit.
- Whenever you remove the batteries — to replace them, for example — if too much time is taken, the code numbers may revert to the factory setting and must be reset.

## SECTION 2 DISASSEMBLY

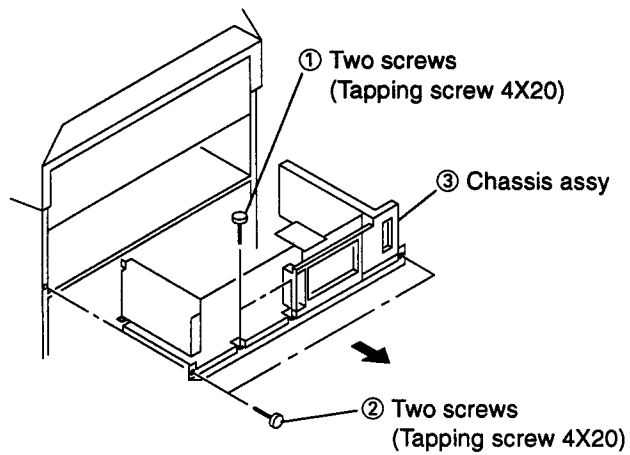
### 2-1-1. REAR PLATE REMOVAL (KP-46V35/53V35)



### 2-1-2. REAR PLATE REMOVAL (KP-61V35)

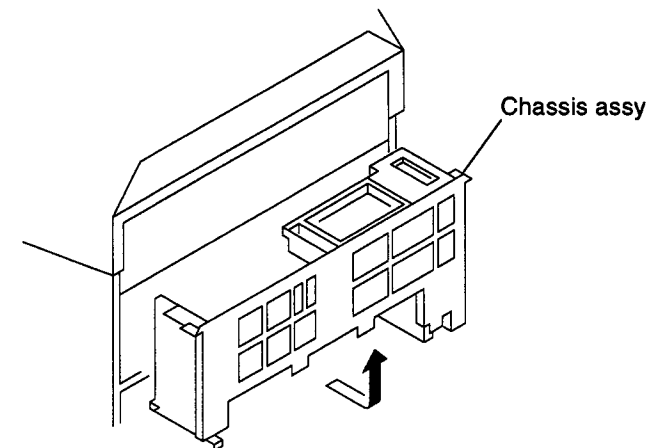


### 2-2. CHASSIS ASSY REMOVAL

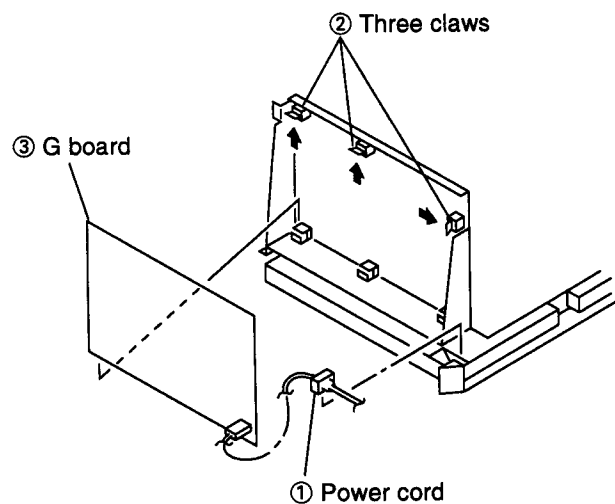


### 2-3. SERVICE POSITION

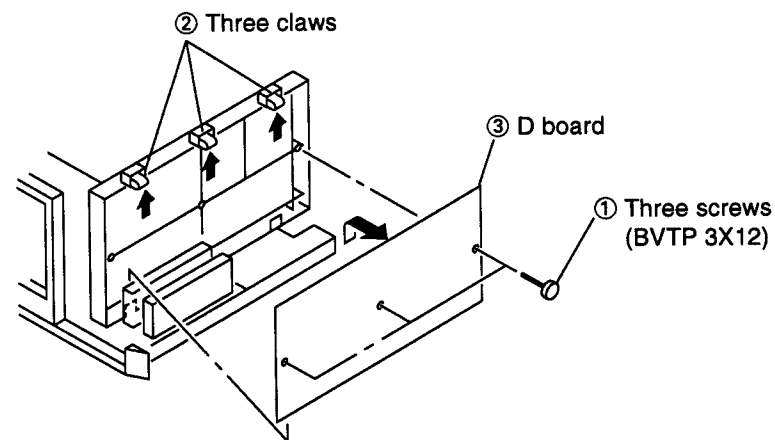
Remove the chassis assy (Refer to 2-2.)



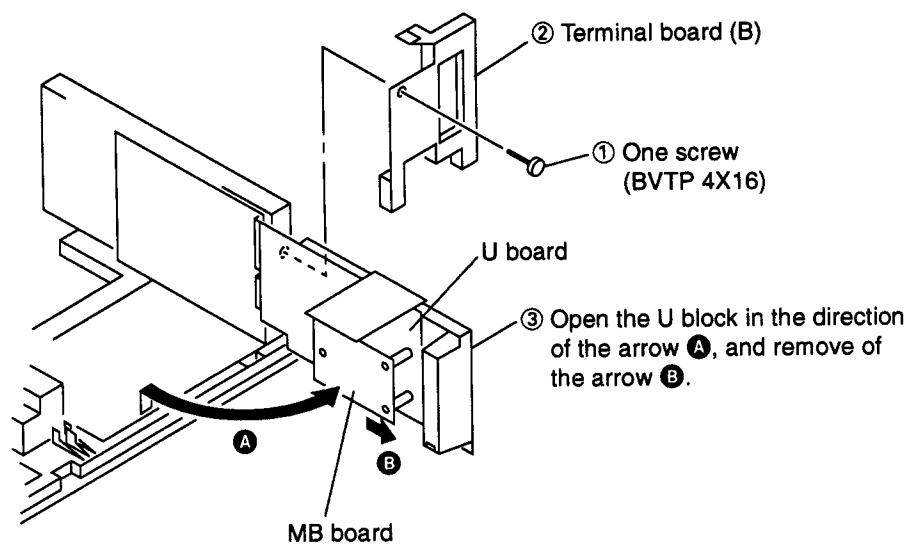
## 2-4. G BOARD REMOVAL



## 2-5. D BOARD REMOVAL

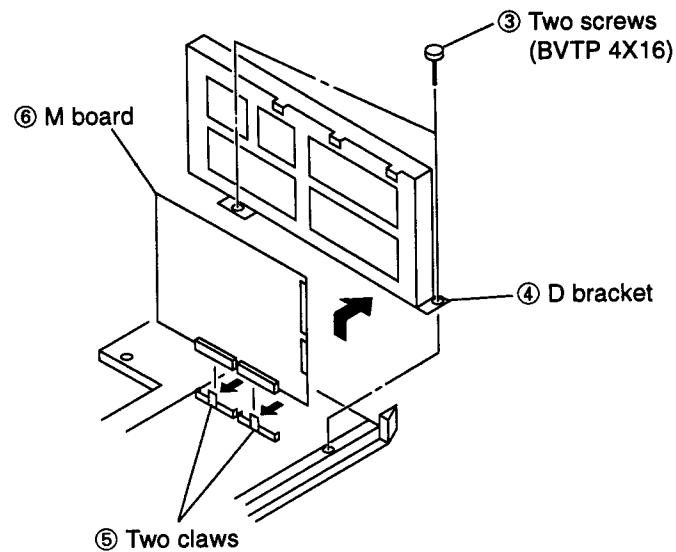


## 2-6. U BOARD REMOVAL

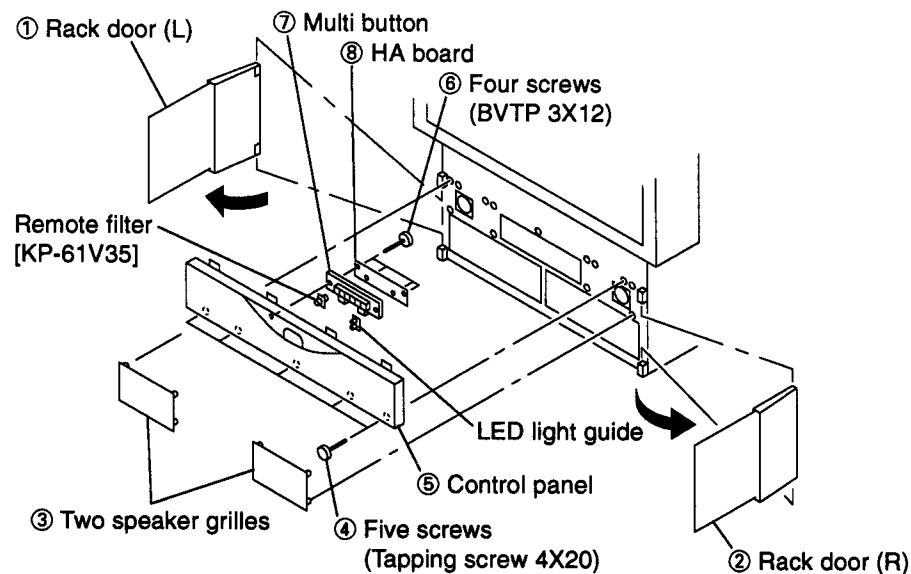


## 2-7. M BOARD REMOVAL

- ① Remove the D board. (Refer to 2-5.)
- ② Remove the U board. (Refer to 2-6.)

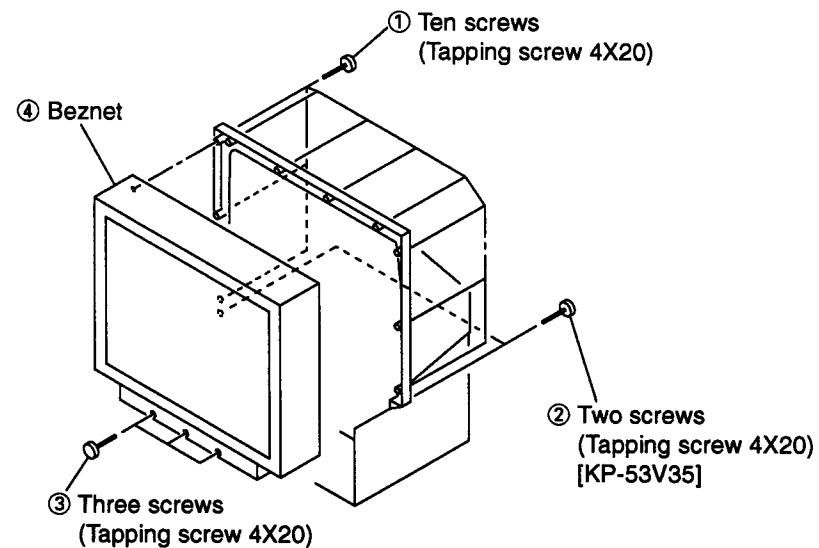


## 2-8. HA BOARD REMOVAL



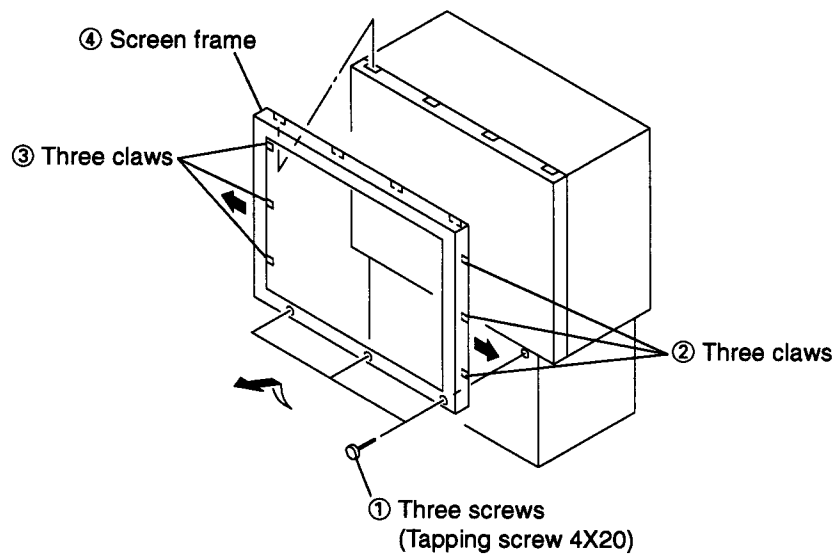
## 2-9-1. BEZNET REMOVAL

[KP-46V35/53V35]



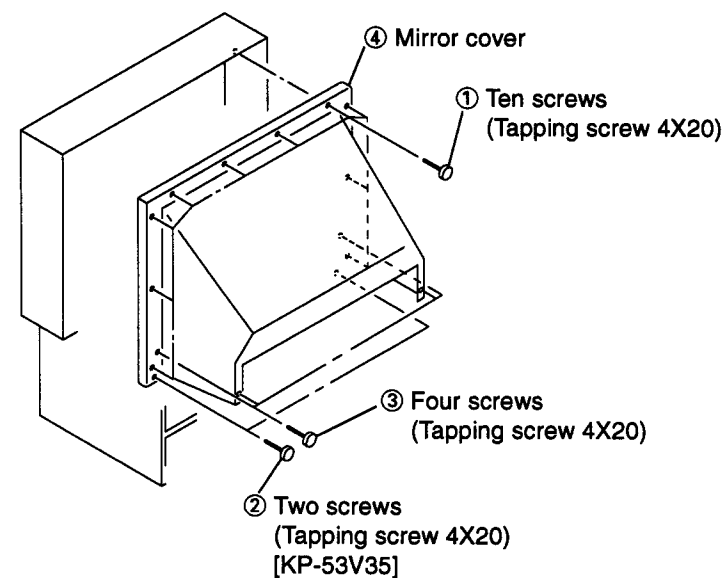
## 2-9-2. SCREEN FRAME REMOVAL

[KP-61V35]

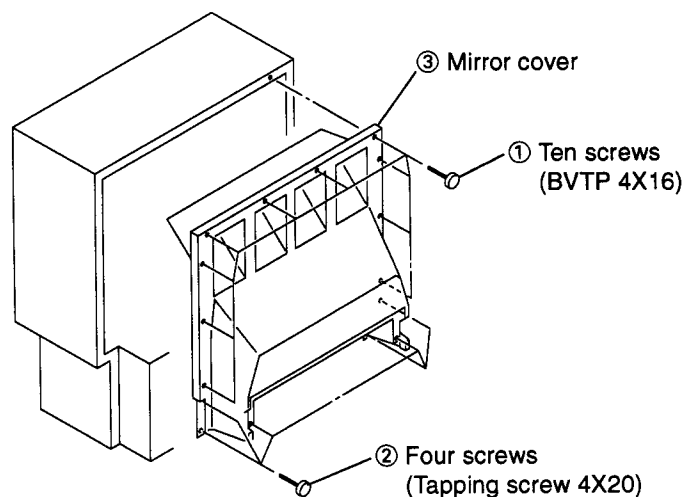


## 2-10-1. MIRROR COVER REMOVAL

[KP-46V35/53V35]



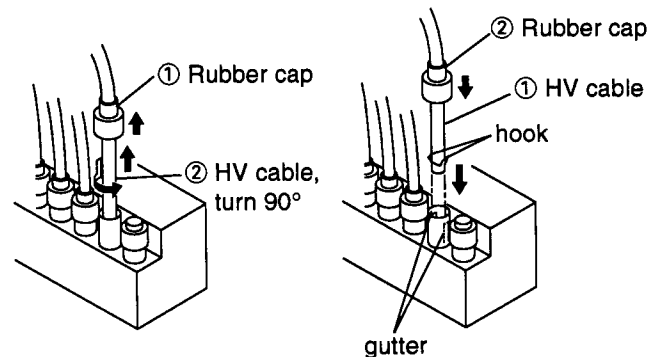
## 2-10-2. MIRROR COVER REMOVAL [KP-61V35]



## 2-11. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL

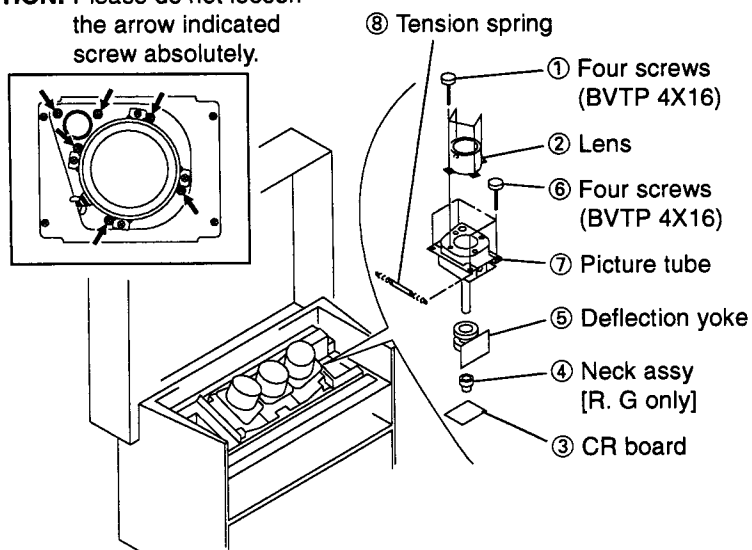
(1) Remover

(2) Installation

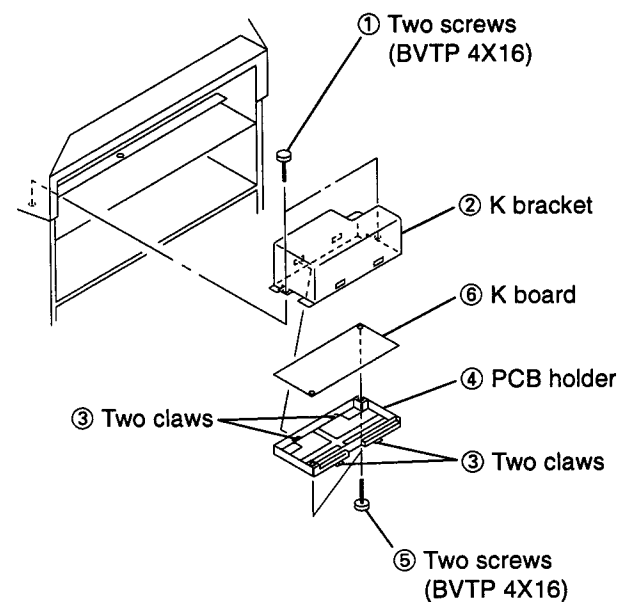


## 2-12. PICTURE TUBE REMOVAL


**CAUTION:** Please do not loosen the arrow indicated screw absolutely.



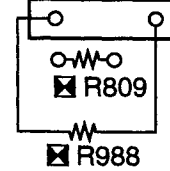




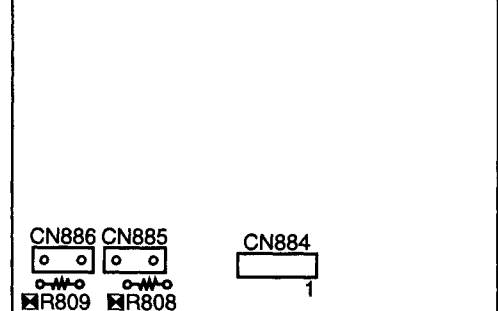
## 2-13. K BOARD REMOVAL

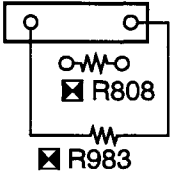
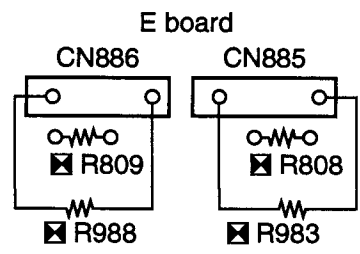


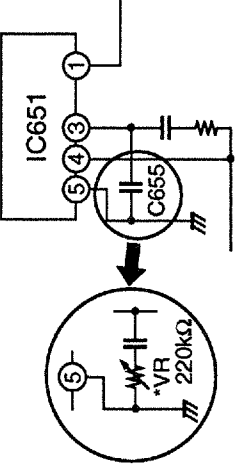
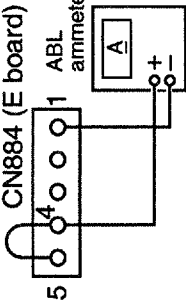
## SAFETY RELATED ADJUSTMENTS

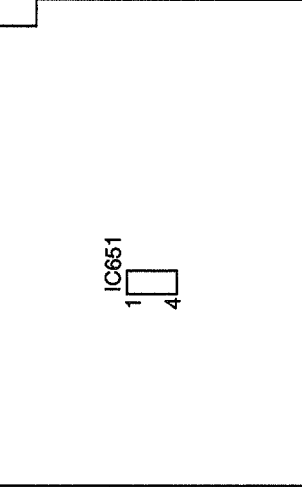
\*  E board  
VR33k $\Omega$



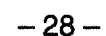
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
<p>5. Gradually lower the value of the variable resistor and check that the hold down circuit operates at a Static Voltmete reading of *33.7 ± 0.8 kVDC and that the rasters disappear.</p> <p>6. If the hold down circuit operates and the rasters disappear at a Static Voltmete meter reading of *34.0 VDC or higher, remove resistor *R809 and mount a *16.0 kΩ 1/4W RN at *R988.</p> <p>If the hold down circuit operates and the rasters disappear at a Static Voltmete reading of *32.0 VDC or lower, remove resistor R809 and mount *6.2 kΩ 1/4W RN at *R988.</p> <p>7. Check Item 5 again.</p>				<p>*33.7 ± 0.8 kVDC</p> <p>*34.0 VDC or higher</p> <p>*16.0 kΩ 1/4W</p> <p>*32.0 VDC or lower</p> <p>*6.2 kΩ 1/4W</p> <p>* CN886 (E board)</p> 
<div><div><b>HV REGULATION CIRCUIT CHECK AND ADJUSTMENT</b> <b>(* RESISTOR)</b></div><p>When replacing the parts marked * on the right, check the HV regulation and adjust.</p></div>		<p>* marked parts</p> <p>C918, C930, C934, C980, D902, D920, D925, Q909, R808, R851, R929, R936, R939, R942, R944, R945, R946, R947, R950, R960, R965, R967, R971, R975, R976, R982, R983, R985, R998</p> <p>..... E Board</p> <p>HV Block</p> <p>*HV Block</p>	<p>* R808, R983</p>	<p>E BOARD – COMPONENT SIDE –</p> 
<p>1. Remove the cap for the unconnected pin in the *high-voltage block and connect a *Static Voltmete.</p> <p>2. Input 120 VAC power.</p> <p>3. Receive the *Dot signal and set the *PICTURE and BRIGHTNESS settings to their minimums.</p>	<p>* Static Voltmete</p> <p>* Dot pattern</p>		<p>*PICTURE</p> <p>.....minimum</p> <p>BRIGHTNESS</p> <p>.....minimum</p>	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
<p>4. Check that the Static Voltmeter reading is <math>*31.0 \pm 0.4</math> kVDC.</p> <p>5. If the Static Voltmeter reading is <math>*30.5</math> kV or lower, remove resistor <math>*R808</math> and mount <math>*5.6</math> k<math>\Omega</math> 1/4W RN at <math>*R983</math>.</p> <p>6. If the Static Voltmeter reading is <math>*31.4</math> KV or higher, remove resistor <math>*R808</math> and mount <math>*8.2</math> k<math>\Omega</math> 1/4W RN at <math>*R983</math>.</p> <p>7. If the Static Voltmeter reading is <math>*32.0</math> kV or higher, remove resistor <math>*R808</math> and mount <math>*10.0</math> k<math>\Omega</math> 1/4W RN at <math>*R983</math>.</p> <p>8. If any of Items 5, 6 or 7 has been implemented, check Item 4 again.</p> <div data-bbox="117 740 714 821" style="border: 1px solid black; padding: 5px; margin-top: 20px;"> <p><b>HV HOLD DOWN AND HV REGULATOR SIMPLE ADJUSTMENT</b></p> </div> <p>It is normally desirable that the HV hold down and HV regulation checks use a high-voltage meter. However, sometime one is not available, for example in the field, below is a simple adjustment method.</p> <p>When replacing parts with the <math>\blacksquare</math> mark, replace both the resistors with the <math>\boxtimes</math> mark <math>*R808</math> (R988) and <math>*R809</math> (R983) with resistors one rank lower in the E-12 series. Do not replace just one of these resistors! Always replace both with resistors one rank lower.</p>			<p><math>*R983</math></p> <p><math>*R983</math></p> <p><math>*R983</math></p> <p><math>*R808</math> (R988)</p> <p><math>*R809</math> (R983)</p>	<p><math>*31.0 \pm 0.4</math> kVDC</p> <p><math>*30.5</math> kV or lower  <math>*5.6</math> k<math>\Omega</math> 1/4W  <math>*31.4</math> KV or higher  <math>*8.2</math> k<math>\Omega</math> 1/4W  <math>*32.0</math> kV or higher  <math>*10.0</math> k<math>\Omega</math> 1/4W</p> <p><math>*CN885</math> (E board)</p>  <p><math>*R983</math></p> <p><math>*R808</math> (R988)</p> <p><math>*R809</math> (R983)</p> <p><math>*R988</math></p> <p><math>*R983</math></p> 

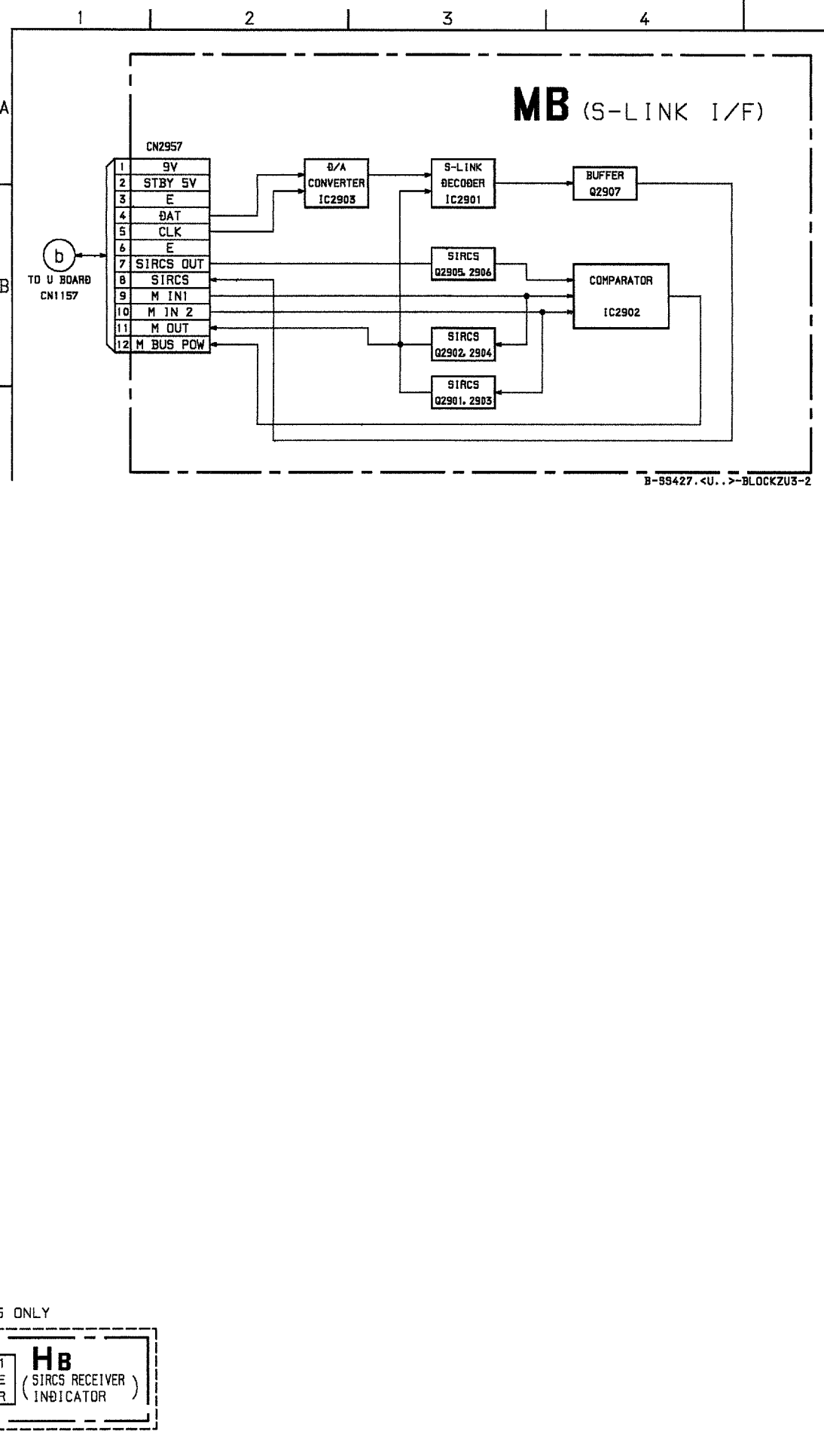
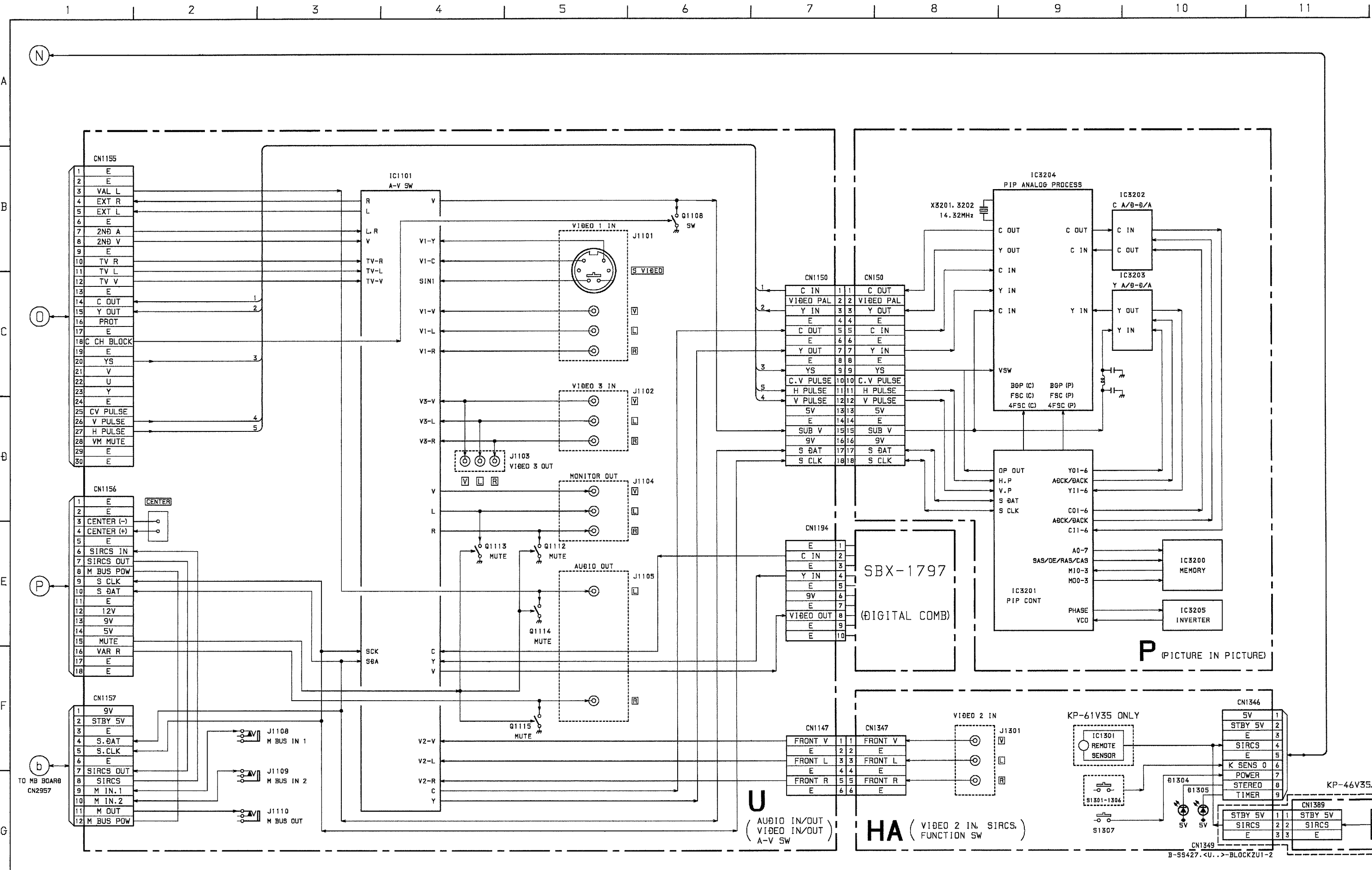
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
<div>OVERVOLTAGE PROTECTION (OVP) OPERATIONS CHECK</div> <div>1. Connect a *220 kΩ variable resistance rheostat to the G board C655 (between Pins ③ and ⑤ of IC651).</div> <div>2. Input *120.0 ± 1.0 VAC, 60 Hz power.</div> <div>3. Receive the *Dot signal and set the *PICTURE and BRIGHTNESS settings to their minimums.</div> <div>4. Gradually lower the value of the connected variable resistance and check that when the +B line *voltage is *143.5 ± 5.5 VDC, the overvoltage circuit operates and the rasters disappear.</div> <div>5. Remove the variable resistor and check the +B line voltage.</div>	<div>*Dot pattern</div> <div>*Digital Multimeter</div>			<div>*</div> <div>* 120.0 ± 1.0 VAC, 60 Hz</div> <div>* 143.5 ± 5.5 VDC</div> <div>*</div> <div>* 120.0 ± 1.0 VAC, 60 Hz</div>
<div>BEAM CURRENT (ΣIk) PROTECTION CIRCUIT CHECK</div> <div>1. Connect the *ABL ammeter between *Pins ① and ④ of the CN884 on the E board.</div> <div>Have Pins ② and ③ open.</div> <div>2. Input *120.0 ± 1.0 VAC, 60 Hz power.</div> <div>3. Receive a *monoscope signal and set the *PICTURE and BRIGHTNESS settings to their minimums.</div>	<div>*Ammeter</div> <div>*Monoscope pattern</div>		<div>*PICTURE ..... minimum BRIGHTNESS ..... minimum</div>	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
<div>4. Gradually raise the *PICTURE and BRIGHTNESS settings and check that below an *ABL current of 3,35 mA (including dark current), the beam current protection circuit operates and the rasters disappear.</div> <div>+B, +B MAX CHECK</div> <div>When replacing the G board IC651, check the following.</div> <div>1. Input *120.0 ± 1.0 V, 60 Hz power.</div> <div>2. Receive the *Dot signal and set the *PICTURE and BRIGHTNESS settings to their minimums.</div> <div>3. Check that the *+B line voltage is now *135.0 ± 2.0 VDC.</div> <div>4. Set the power supply to *130.0 <sup>+2.0</sup><sub>-0</sub> VAC.</div> <div>5. Check that the *+B line voltage is *137.0 VDC max.</div> <div>6. If either 3 or 5 is not satisfied, replace IC651 again.</div>	<div>*Dot pattern</div>	<div>*CN681 pin ①</div> <div>*CN681 pin ①</div>	<div>*PICTURE BRIGHTNESS</div> <div>*PICTURE ..... minimum BRIGHTNESS ..... minimum</div>	<div>*Less than 3.35 mA</div> <div>E BOARD – COMPONENT SIDE – </div> <div>* 120.0 ± 1.0 V, 60 Hz</div> <div>* 135.0 ± 2.0 VDC * 130.0 <sup>+2.0</sup><sub>-0</sub> VAC * Less than 137.0 VDC</div>

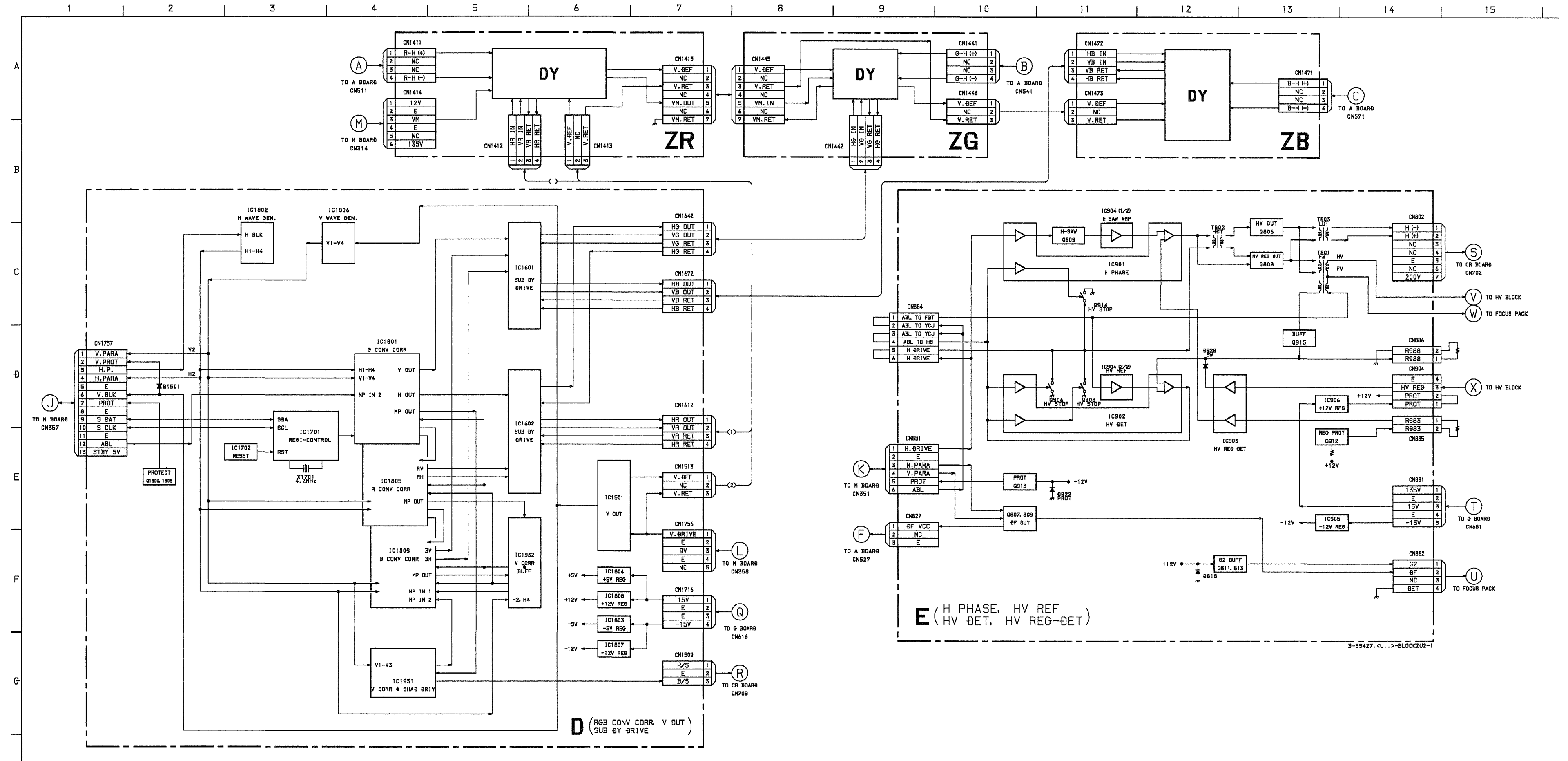
#### 4-1. BLOCK DIAGRAMS (1)



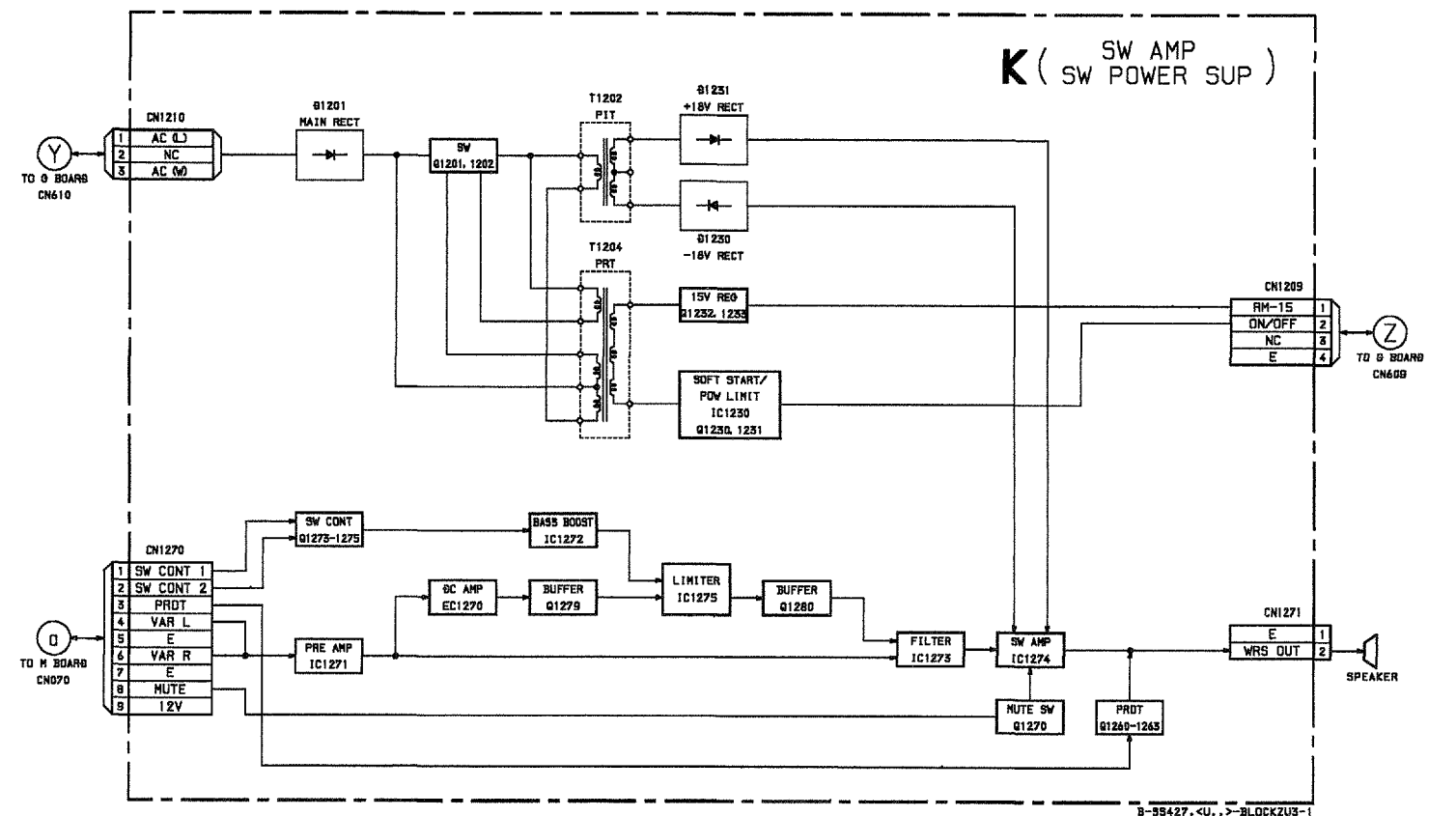
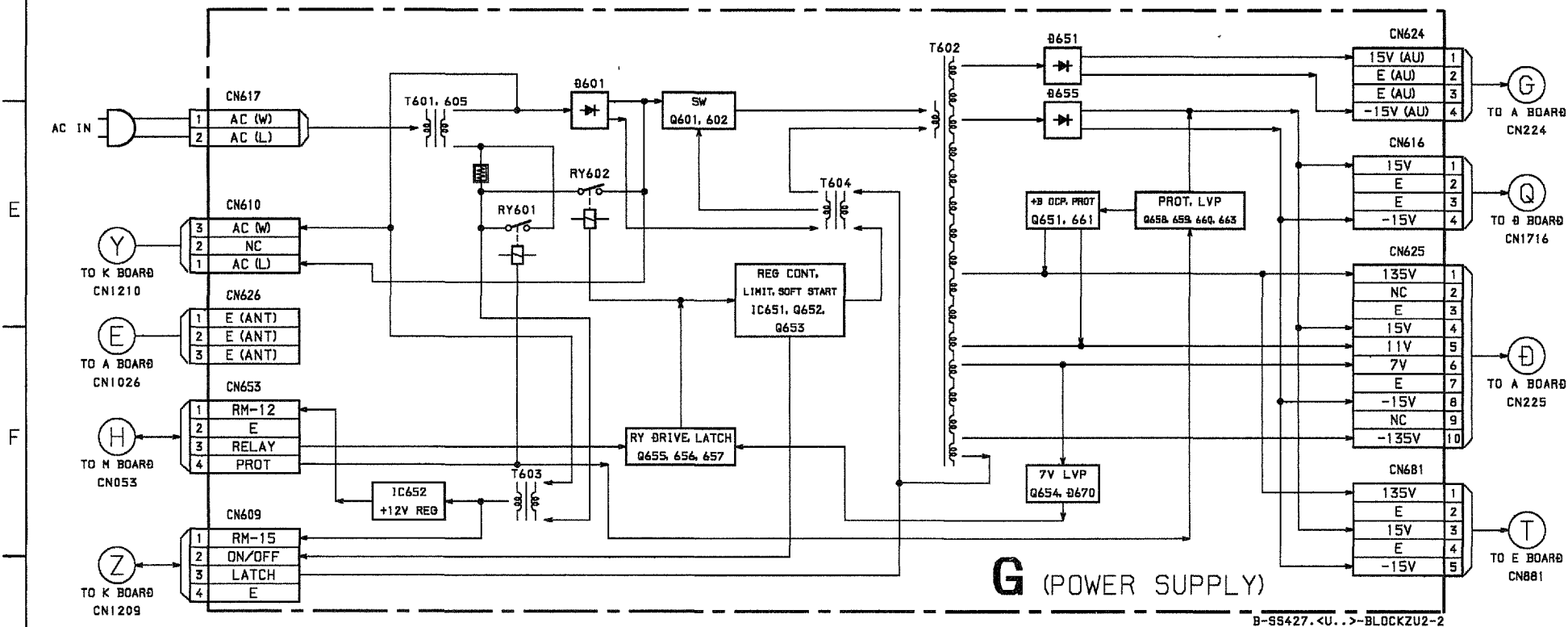
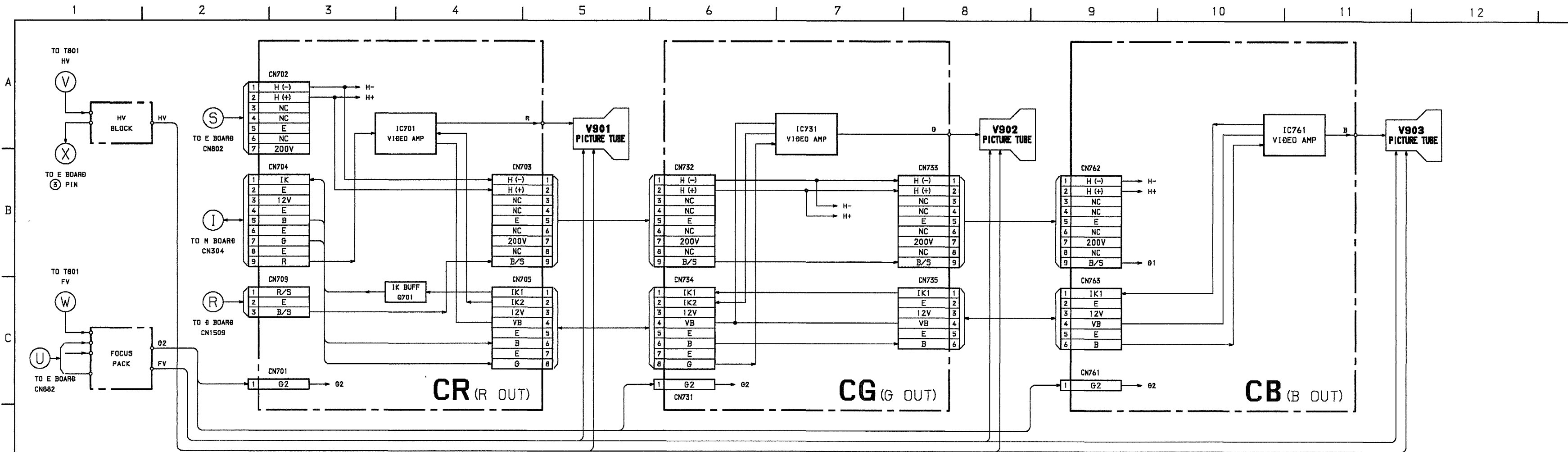
BLOCK DIAGRAMS (2)



### BLOCK DIAGRAMS (3)



BLOCK DIAGRAMS (4)



RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFRAMMABLE CARBON
	: FUSE	NONFRAMMABLE FUSIBLE
	: RW	NONFRAMMABLE WIREWOUND
	: RS	NONFRAMMABLE METAL OXIDE
	: RB	NONFRAMMABLE CEMENT
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM

IC	
IC201	B - 9
IC202	B - 7
IC230	D - 8
IC262	A - 3
IC263	A - 2
IC264	A - 5
IC270	B - 6
IC271	A - 9
IC1001	F - 11

The image shows a top-down view of a radio receiver PCB. The board is populated with several integrated circuits (ICs) and passive components. IC263, IC262, and IC264 are large, dark, rectangular components. IC271 is a smaller, 16-pin component. The board is marked with a grid from 1 to 13 and A. Key components include capacitors (C278, C277, C276, C275, C274, C273, C272, C271, C270, C269, C268, C267, C266, C265, C264, C263, C262, C261, C260, C259, C258, C257, C256, C255, C254, C253, C252, C251, C250, C249, C248, C247, C246, C245, C244, C243, C242, C241, C240, C239, C238, C237, C236, C235, C234, C233, C232, C231, C230, C229, C228, C227, C226, C225, C224, C223, C222, C221, C220, C219, C218, C217, C216, C215, C214, C213, C212, C211, C210, C209, C208, C207, C206, C205, C204, C203, C202, C201, C200, C199, C198, C197, C196, C195, C194, C193, C192, C191, C190, C189, C188, C187, C186, C185, C184, C183, C182, C181, C180, C179, C178, C177, C176, C175, C174, C173, C172, C171, C170, C169, C168, C167, C166, C165, C164, C163, C162, C161, C160, C159, C158, C157, C156, C155, C154, C153, C152, C151, C150, C149, C148, C147, C146, C145, C144, C143, C142, C141, C140, C139, C138, C137, C136, C135, C134, C133, C132, C131, C130, C129, C128, C127, C126, C125, C124, C123, C122, C121, C120, C119, C118, C117, C116, C115, C114, C113, C112, C111, C110, C109, C108, C107, C106, C105, C104, C103, C102, C101, C100, C99, C98, C97, C96, C95, C94, C93, C92, C91, C90, C89, C88, C87, C86, C85, C84, C83, C82, C81, C80, C79, C78, C77, C76, C75, C74, C73, C72, C71, C70, C69, C68, C67, C66, C65, C64, C63, C62, C61, C60, C59, C58, C57, C56, C55, C54, C53, C52, C51, C50, C49, C48, C47, C46, C45, C44, C43, C42, C41, C40, C39, C38, C37, C36, C35, C34, C33, C32, C31, C30, C29, C28, C27, C26, C25, C24, C23, C22, C21, C20, C19, C18, C17, C16, C15, C14, C13, C12, C11, C10, C9, C8, C7, C6, C5, C4, C3, C2, C1, C0, C-1, C-2, C-3, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, C-46, C-47, C-48, C-49, C-50, C-51, C-52, C-53, C-54, C-55, C-56, C-57, C-58, C-59, C-60, C-61, C-62, C-63, C-64, C-65, C-66, C-67, C-68, C-69, C-70, C-71, C-72, C-73, C-74, C-75, C-76, C-77, C-78, C-79, C-80, C-81, C-82, C-83, C-84, C-85, C-86, C-87, C-88, C-89, C-90, C-91, C-92, C-93, C-94, C-95, C-96, C-97, C-98, C-99, C-100, C-101, C-102, C-103, C-104, C-105, C-106, C-107, C-108, C-109, C-110, C-111, C-112, C-113, C-114, C-115, C-116, C-117, C-118, C-119, C-120, C-121, C-122, C-123, C-124, C-125, C-126, C-127, C-128, C-129, C-130, C-131, C-132, C-133, C-134, C-135, C-136, C-137, C-138, C-139, C-140, C-141, C-142, C-143, C-144, C-145, C-146, C-147, C-148, C-149, C-150, C-151, C-152, C-153, C-154, C-155, C-156, C-157, C-158, C-159, C-160, C-161, C-162, C-163, C-164, C-165, C-166, C-167, C-168, C-169, C-170, C-171, C-172, C-173, C-174, C-175, C-176, C-177, C-178, C-179, C-180, C-181, C-182, C-183, C-184, C-185, C-186, C-187, C-188, C-189, C-190, C-191, C-192, C-193, C-194, C-195, C-196, C-197, C-198, C-199, C-200, C-201, C-202, C-203, C-204, C-205, C-206, C-207, C-208, C-209, C-210, C-211, C-212, C-213, C-214, C-215, C-216, C-217, C-218, C-219, C-220, C-221, C-222, C-223, C-224, C-225, C-226, C-227, C-228, C-229, C-230, C-231, C-232, C-233, C-234, C-235, C-236, C-237, C-238, C-239, C-240, C-241, C-242, C-243, C-244, C-245, C-246, C-247, C-248, C-249, C-250, C-251, C-252, C-253, C-254, C-255, C-256, C-257, C-258, C-259, C-260, C-261, C-262, C-263, C-264, C-265, C-266, C-267, C-268, C-269, C-270, C-271, C-272, C-273, C-274, C-275, C-276, C-277, C-278, C-279, C-280, C-281, C-282, C-283, C-284, C-285, C-286, C-287, C-288, C-289, C-290, C-291, C-292, C-293, C-294, C-295, C-296, C-297, C-298, C-299, C-300, C-301, C-302, C-303, C-304, C-305, C-306, C-307, C-308, C-309, C-310, C-311, C-312, C-313, C-314, C-315, C-316, C-317, C-318, C-319, C-320, C-321, C-322, C-323, C-324, C-325, C-326, C-327, C-328, C-329, C-330, C-331, C-332, C-333, C-334, C-335, C-336, C-337, C-338, C-339, C-340, C-341, C-342, C-343, C-344, C-345, C-346, C-347, C-348, C-349, C-350, C-351, C-352, C-353, C-354, C-355, C-356, C-357, C-358, C-359, C-360, C-361, C-362, C-363, C-364, C-365, C-366, C-367, C-368, C-369, C-370, C-371, C-372, C-373, C-374, C-375, C-376, C-377, C-378, C-379, C-380, C-381, C-382, C-383, C-384, C-385, C-386, C-387, C-388, C-389, C-390, C-391, C-392, C-393, C-394, C-395, C-396, C-397, C-398, C-399, C-400, C-401, C-402, C-403, C-404, C-405, C-406, C-407, C-408, C-409, C-410, C-411, C-412, C-413, C-414, C-415, C-416, C-417, C-418, C-419, C-420, C-421, C-422, C-423, C-424, C-425, C-426, C-427, C-428, C-429, C-430, C-431, C-432, C-433, C-434, C-435, C-436, C-437, C-438, C-439, C-440, C-441, C-442, C-443, C-444, C-445, C-446, C-447, C-448, C-449, C-450, C-451, C-452, C-453



### A BOARD IC VOLTAGE LIST

ALL VOLTAGES ARE IN V

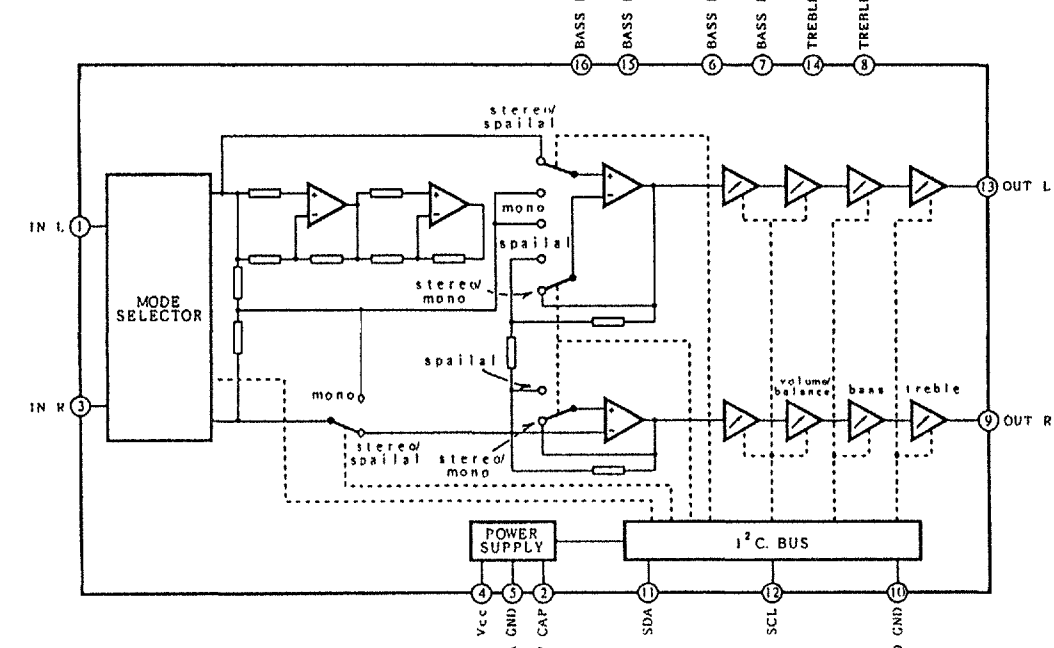
IC201	1 6.1 2 6.1	3 6.1 4 GND	5 6.1 6 6.1	7 6.1 8 12.0	
IC202	1 6.0 2 12.0 3 6.0 4 12.0	5 GND 6 6.1 7 6.1 8 6.1	9 6.1 10 GND 11 4.6 12 4.6	13 6.1 14 6.1 15 6.1 16 6.1	17 NC 18 NC 19 NC 20 NC
IC230	1 -16.3 2 0 3 15.0	4 0 5 10.6 6 -16.3	7 0 8 0 9 GND	10 0 11 0	
IC262	1 11.0	2 9.0	3 GND	4 11.0	
IC263	1 7.0	2 5.0	3 GND	4 7.0	
IC264	1 15.0	2 GND	3 12.0		
IC270	1 2 GND 3 4 5 6 7	8 9 10 11 12 GND 13 GND 14 GND	15 16 17 18 19 20 21	22 23 24 25 26 27 28	29 30 31 12.0 32
IC271	1 NC 2 NC 3 NC 4 NC	5 NC 6 NC 7 8 GND	9 NC 10 11 GND 12 GND	13 GND 14 15 16 12.0	
IC1001	1 2 3 4	5 6 GND 7 GND 8 GND	9 10 11 12 NC	13 NC 14 NC 15 16 9.0	

**A BOARD \* MARK**

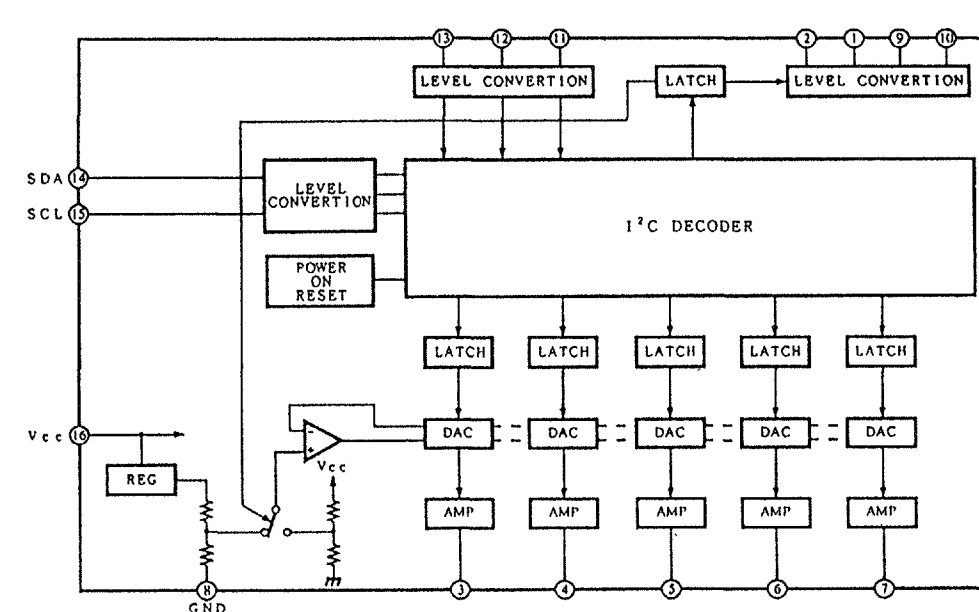
Ref. No.	KP-46V35 (U/C)	KP-53V35 (US)	KP-61V35 (US)
D509	V09G	V09G	—
D510	V09G	V09G	—
R528	270 3W	270 3W	—
R529	270 3W	270 3W	—
R530	270 3W	270 3W	—
R531	270 3W	270 3W	—

— : NOT MOUNT

## A BOARD IC202 TDA8424



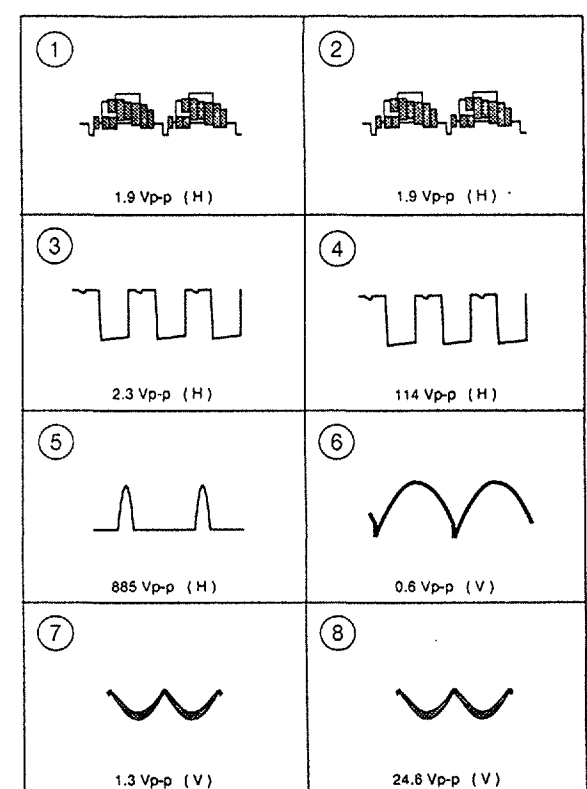
A BOARD IC201 LM358P



## A BOARD TRANSISTOR VOLTAGE LIST

	E	C	B
Q220	GND	0	2.8
Q221	2.8	2.8	2.2
Q222	GND	0	2.8
Q223	11.9	2.8	11.1
Q230	GND	0	0.7
Q231	0	10.6	0
Q232	GND	9.0	0
Q233	GND		
Q234	0	9.0	0
Q235	9.0	0	9.0
Q236	GND	4.6	0
Q237	GND		
Q238	GND		
Q270	12.0		
Q271	GND		
Q501	3.2	0	4.1
Q502	6.9	0.9	6.4
Q503	3.1	6.9	3.7
Q504	GND	4.9	0
Q505	GND	63.7	-0.7
Q506	2.1	-54.0	1.6
Q507	-124.3	-137.3	-121.6
Q508	2.1	-121.6	1.7
Q509	-122.9	-137.3	-123.2
Q510	-122.9	*	-123.5
Q511	1.6	GND	0.9
Q1001		GND	
Q1002	9.0	GND	
Q1003	5.6	GND	5.1
Q1004	GND	0	0

## • A BOARD WAVEFORMS

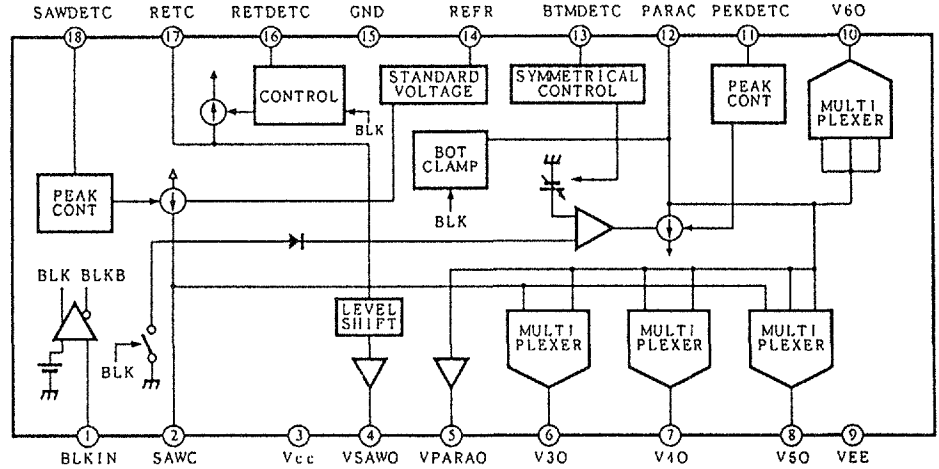


IC1501	1	1.5	3	-138	5	0.3	7	1.5
	2	150	4	-150	6	150		
IC1601	1	-133	6	0.4	11	142	16	-150
	2	-133	7	0.4	12	-143	17	-150
	3	-133	8	GND	13	-143	18	150
	4	0	9	0	14	142	19	-150
	5	0	10	0	15	150	20	0
IC1602	1	-133	6	-0.1	11	142	16	-150
	2	-133	7	-0.1	12	-143	17	-150
	3	-133	8	GND	13	-143	18	150
	4	0.2	9	-0.5	14	142	19	-150
	5	0.2	10	-0.5	15	150	20	-0.2
IC1701	1	NC	15	NC	29	NC	43	0
	2	NC	16	NC	30	NC	44	0
	3	NC	17	NC	31	0.3	45	NC
	4	NC	18	NC	32	GND	46	GND
	5	NC	19	NC	33	NC	47	GND
	6	NC	20	NC	34	2.7	48	GND
	7	NC	21	5.1	35	25	49	NC
	8	NC	22	NC	36	5.2	50	NC
	9	NC	23	NC	37	NC	61	NC
	10	NC	24	3.2	38	NC	62	NC
	11	NC	25	NC	39	0	53	NC
	12	NC	26	NC	40	0	54	4.7
	13	NC	27	NC	41	0	55	NC
	14	NC	28	NC	42	0	56	4.6
IC1702	1	5.2	2	5.0	3	GND		
IC1801	1	0	10	3.4	19	0	28	0
	2	-0.9	11	5.1	20	-0.5	29	0
	3	0	12	0.7	21	5.0	30	0
	4	-1.1	13	3.2	22	0	31	3.2
	5	0	14	-2.1	23	1.5	32	0.7
	6	-0.4	15	0	24	0	33	3.2
	7	GND	16	-0.9	25	0	34	3.4
	8	5.2	17	0	26	0	35	0
IC1802	1	0.8	5	-0.9	9	-5.0	13	0.4
	2	1.2	6	0	10	0.3	14	1.3
	3	5.0	7	-1.1	11	0.6	15	GND
	4	0	8	0	12	-0.9	16	-1.7

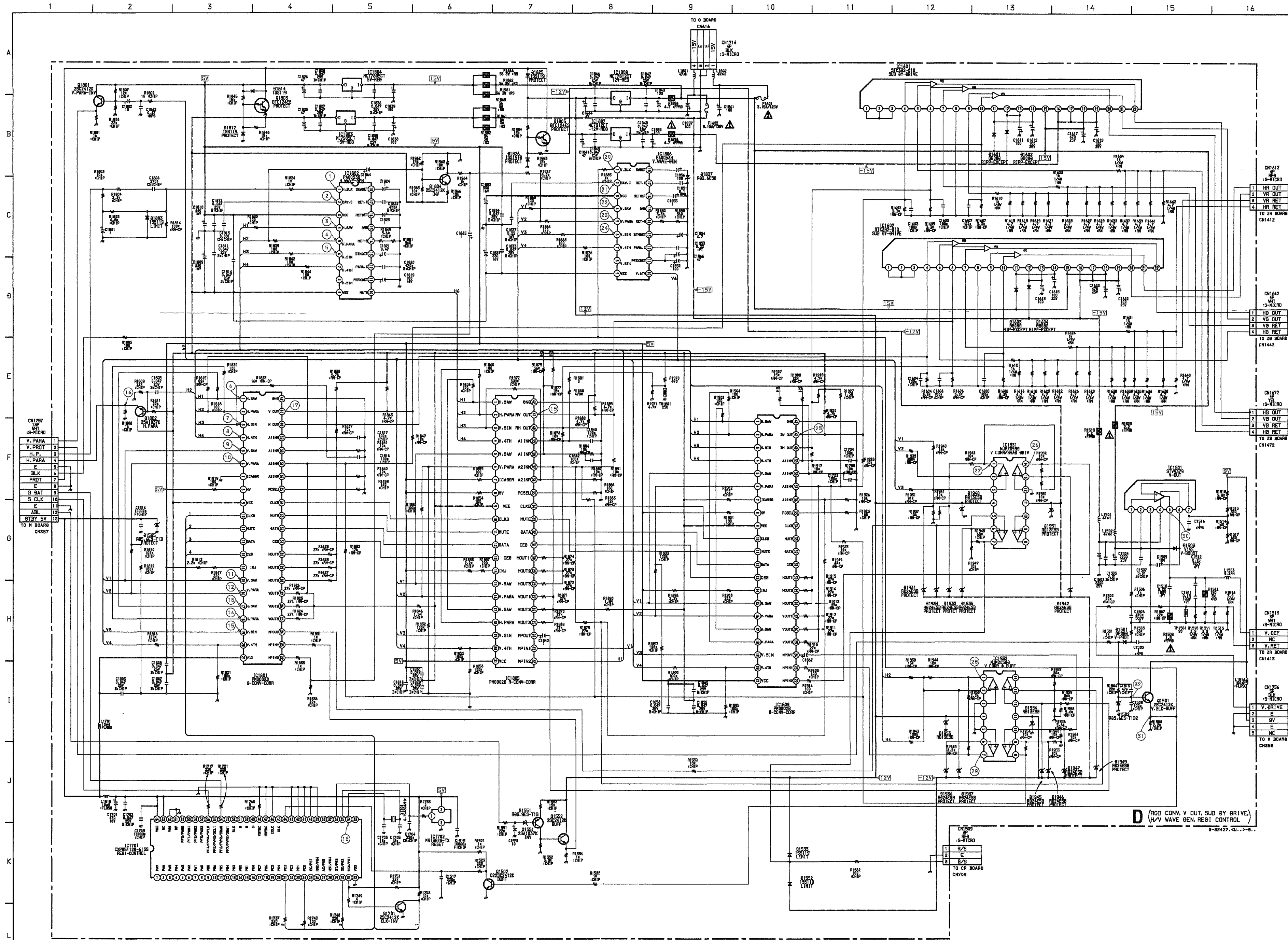
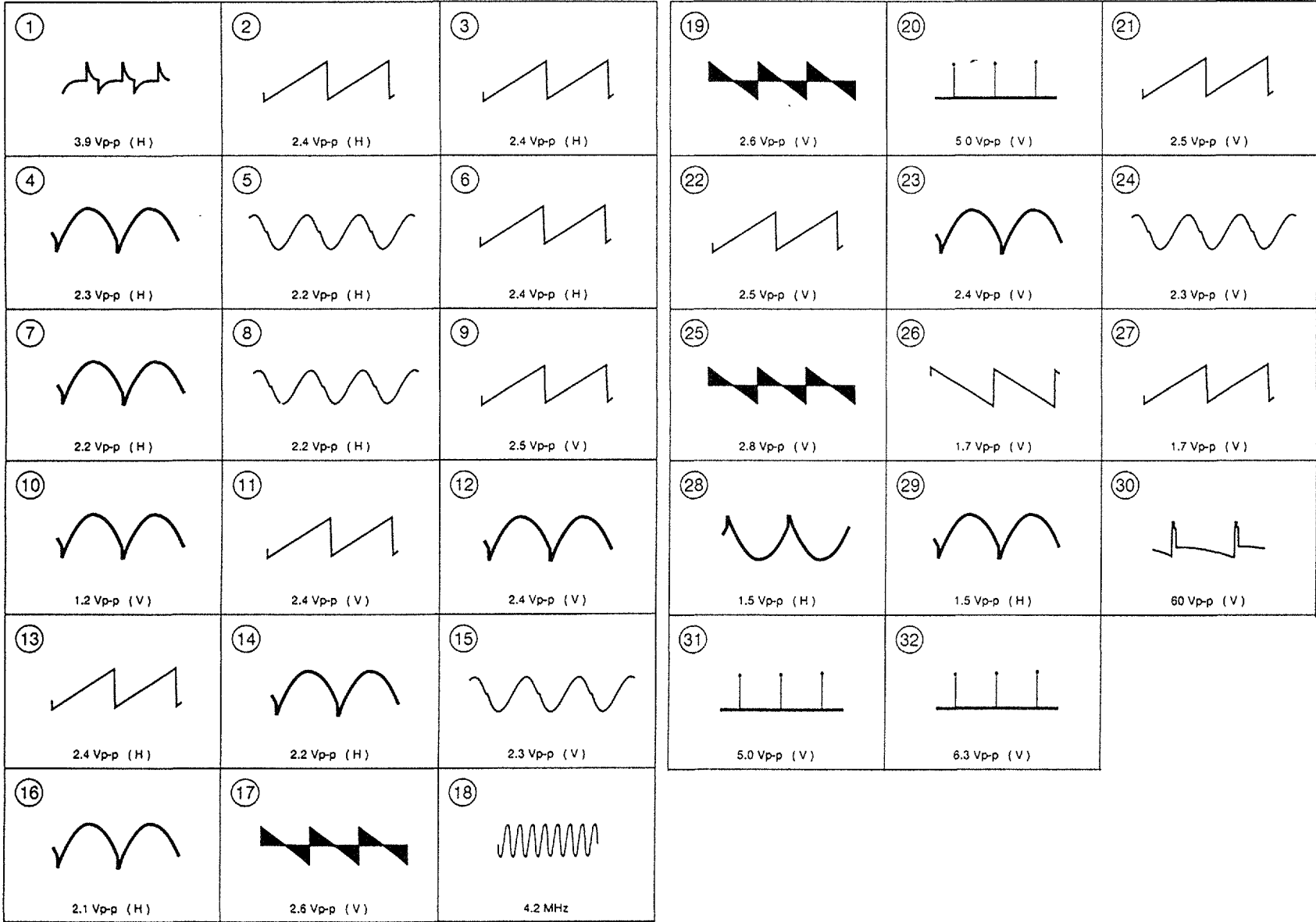
D BOARD TRANSISTOR VOLTAGE LIST

	E	C	B
Q1501	0.2	9.0	-0.5
Q1551	4.0	2.1	3.4
Q1552	1.5	12.0	2.1
Q1701	GND	3.5	0.3
Q1801	2.6	5.0	3.2
Q1802	-2.5	-5.0	-3.1
Q1803	GND	4.8	0
Q1804	-0.3	0	-0.9
Q1805	GND	4.8	0

D BOARD IC1802 PA0053B



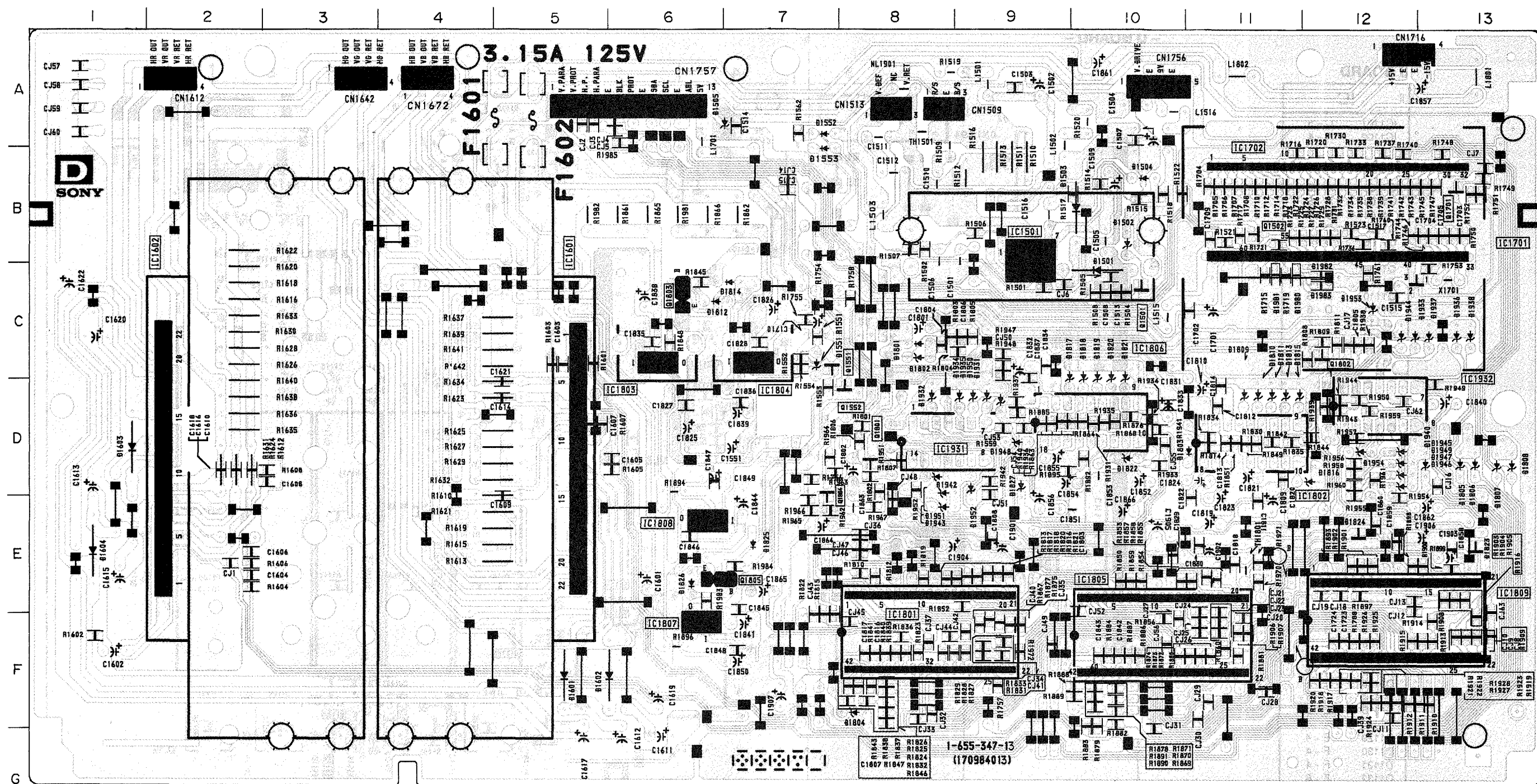
D BOARD WAVEFORMS





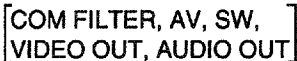
**D** RGB CONV, V OUT, SUB DY DRIVE,  
H/V WAVE GEN, REGI CONTROL

— D BOARD —



D BOARD

IC	IC1807	F-7	Q1802	C-12	D1601	F-5	D1935	D-9
IC1501	IC1808	E-7	Q1803	C-6	D1602	F-6	D1936	C-13
IC1601	IC1809	F-12	Q1804	E-8	D1603	D-2	D1937	C-13
IC1602	IC1931	D-9	Q1805	E-7	D1604	E-1	D1942	E-9
IC1701	IC1932	D-13	DIODE		D1803	D-11	D1945	D-13
IC1702	TRANSISTOR		D1501	C-10	D1812	C-7	D1946	E-13
IC1801	Q1501	C-10	D1502	B-10	D1814	C-7	D1947	E-13
IC1802	Q1502	B-11	D1503	B-10	D1825	E-7	D1948	D-9
IC1803	Q1551	D-8	D1505	A-6	D1826	E-6	D1949	D-13
IC1804	Q1552	D-8	D1551	D-8	D1827		D1951	E-9
IC1805	Q1701	B-13	D1552	B-8	D1931	D-9	D1953	C-12
IC1806	Q1801	D-8	D1553	B-8	D1932	D-9	D1954	D-12
					D1934	D-9		



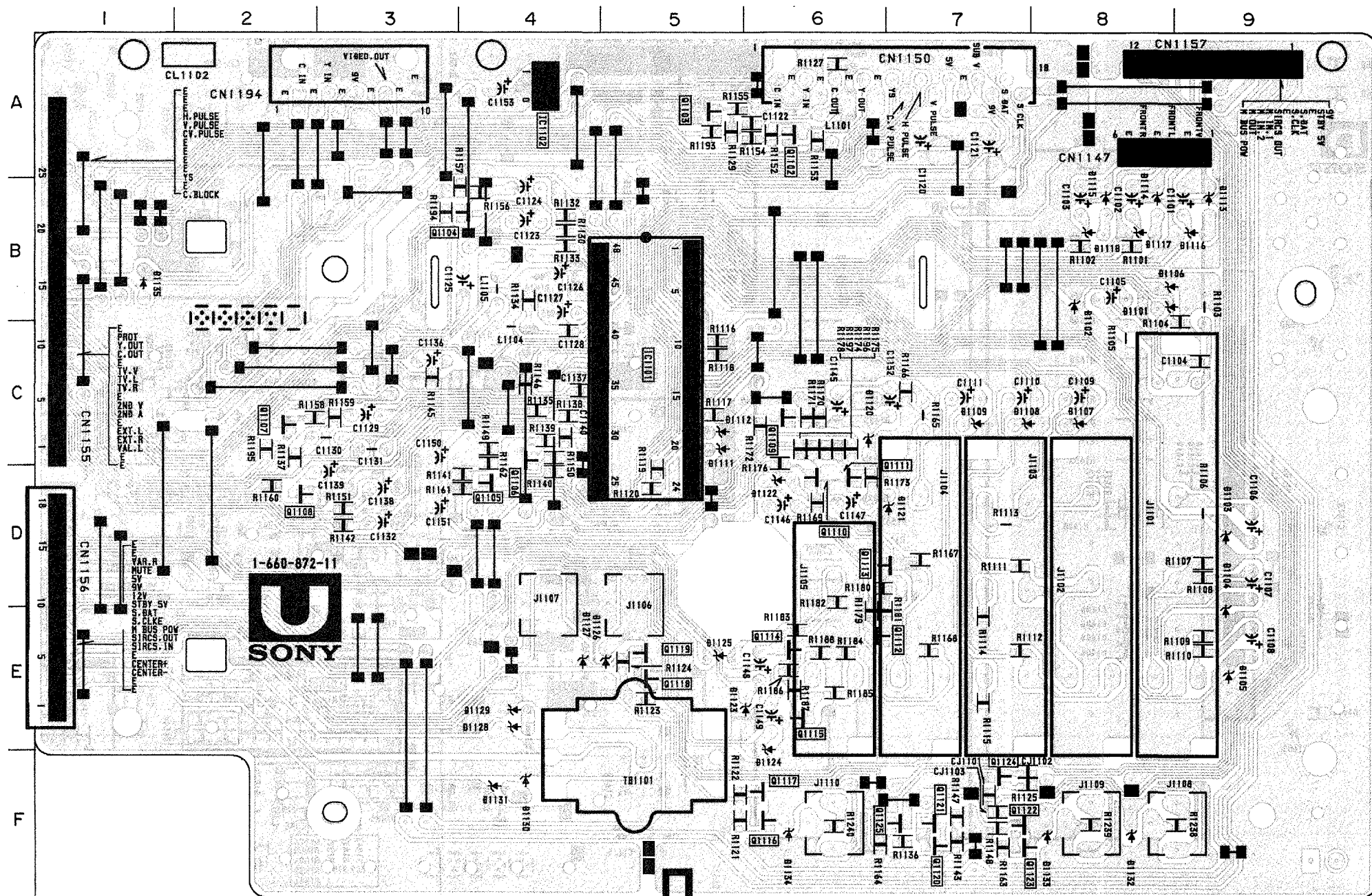
**- U BOARD -**

## U BOARD

IC	
IC1101	C-5
IC1102	A-4

TRANSISTOR	
Q1102	A-6
Q1103	A-5
Q1104	B-4
Q1105	D-4
Q1106	D-4
Q1107	C-2
Q1108	D-2
Q1109	C-6
Q1110	D-6
Q1111	D-6
Q1112	E-7
Q1113	D-7
Q1114	E-6
Q1115	E-6

DIODE	
D1101	B-8
D1102	B-8
D1103	D-9
D1104	D-9
D1105	E-9
D1106	B-8
D1107	C-8
D1108	C-7
D1109	C-7
D1111	C-5
D1112	C-5
D1113	B-9
D1114	B-8
D1115	B-8
D1116	B-9
D1117	B-8
D1118	B-8
D1120	C-6
D1121	D-7
D1122	D-6
D1123	E-6
D1124	F-6
D1125	E-5
D1128	E-4
D1129	E-4
D1130	F-4
D1131	F-4
D1132	F-8
D1133	F-8
D1134	F-6
D1135	B-1







M BOARD IC VOLTAGE LIST

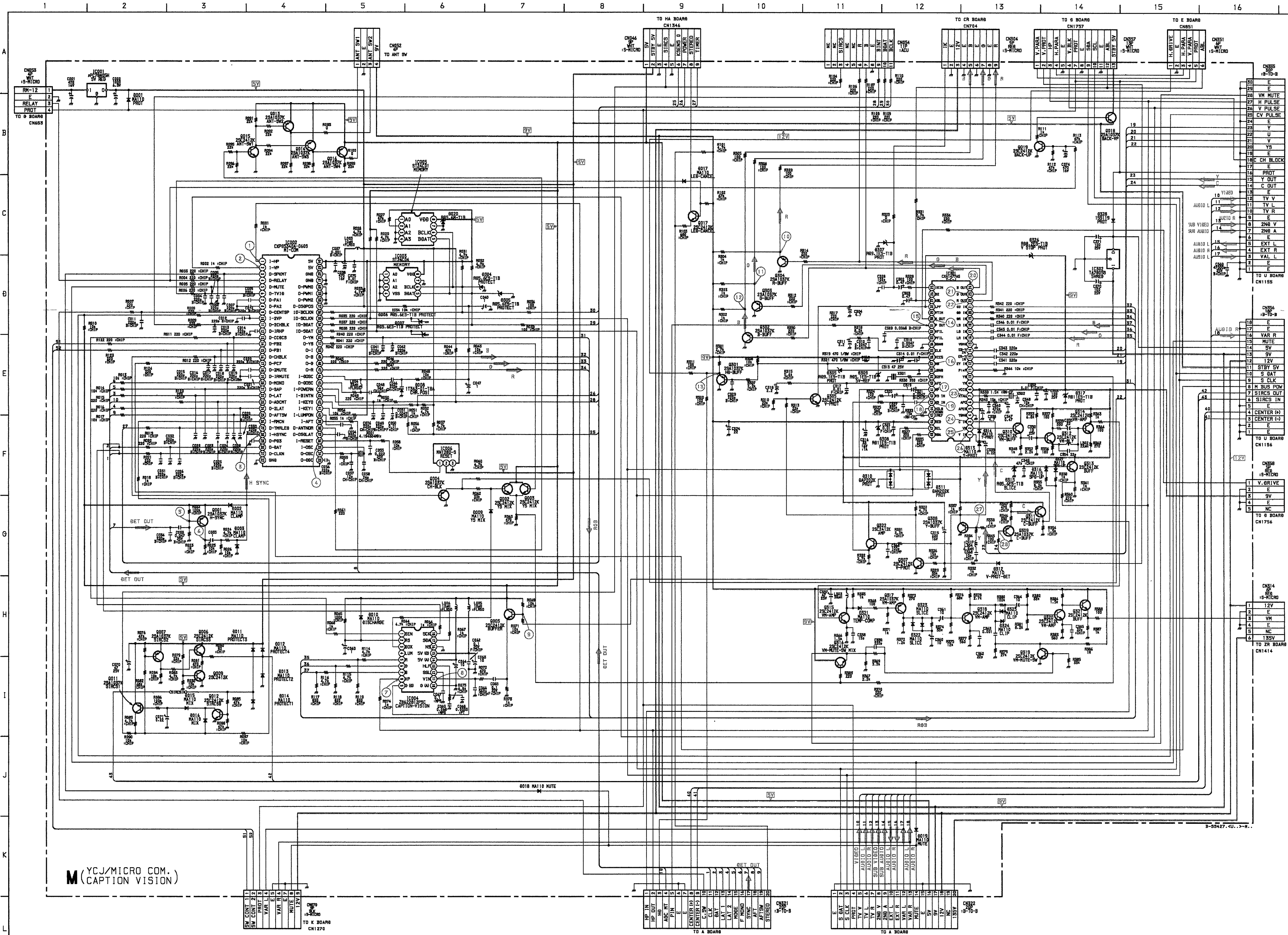
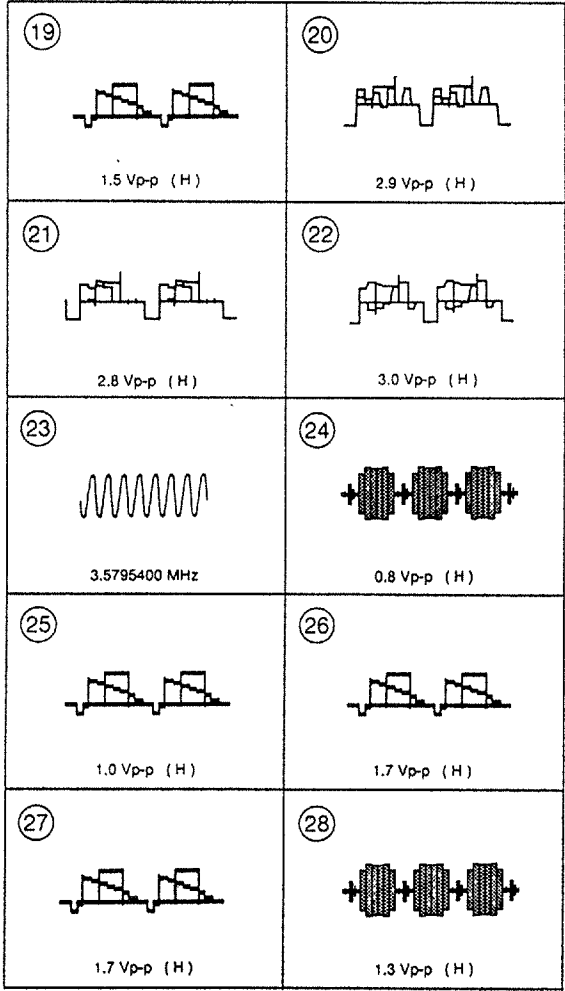
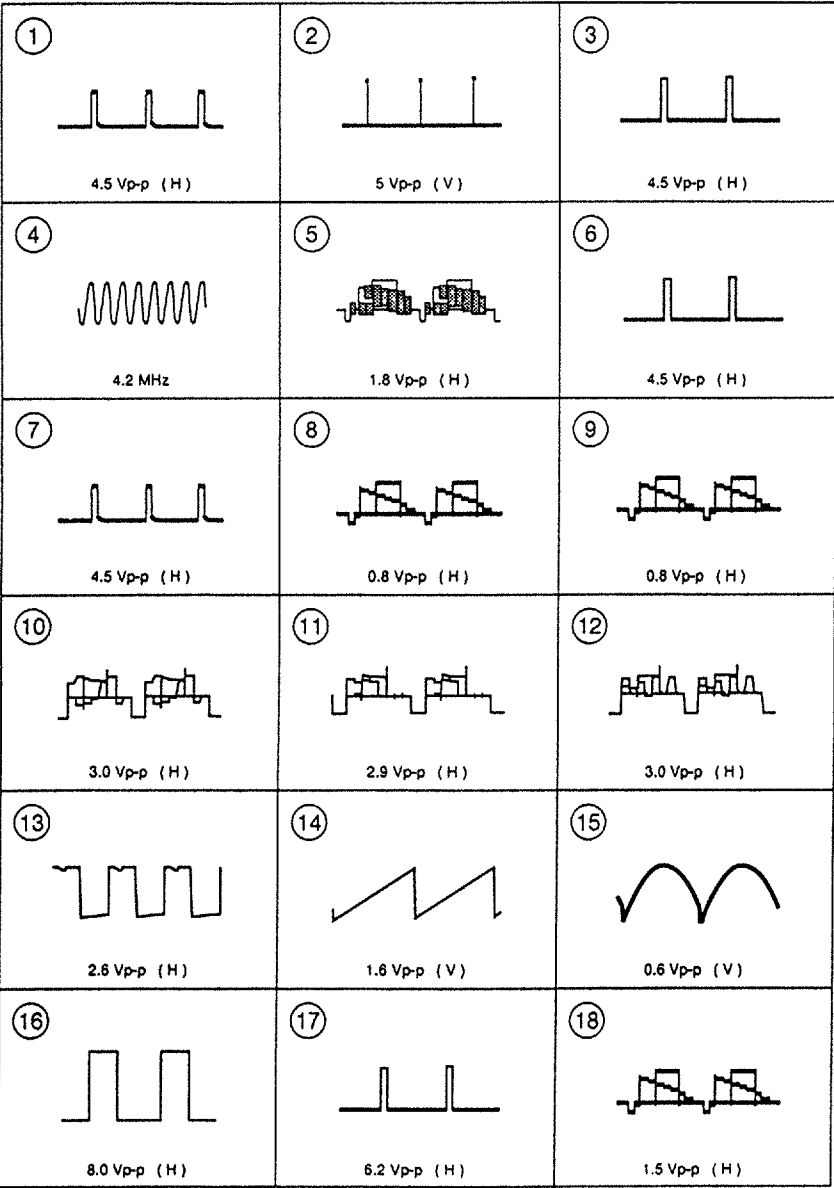
ALL VOLTAGES ARE IN V

M BOARD TRANSISTOR VOLTAGE LIST

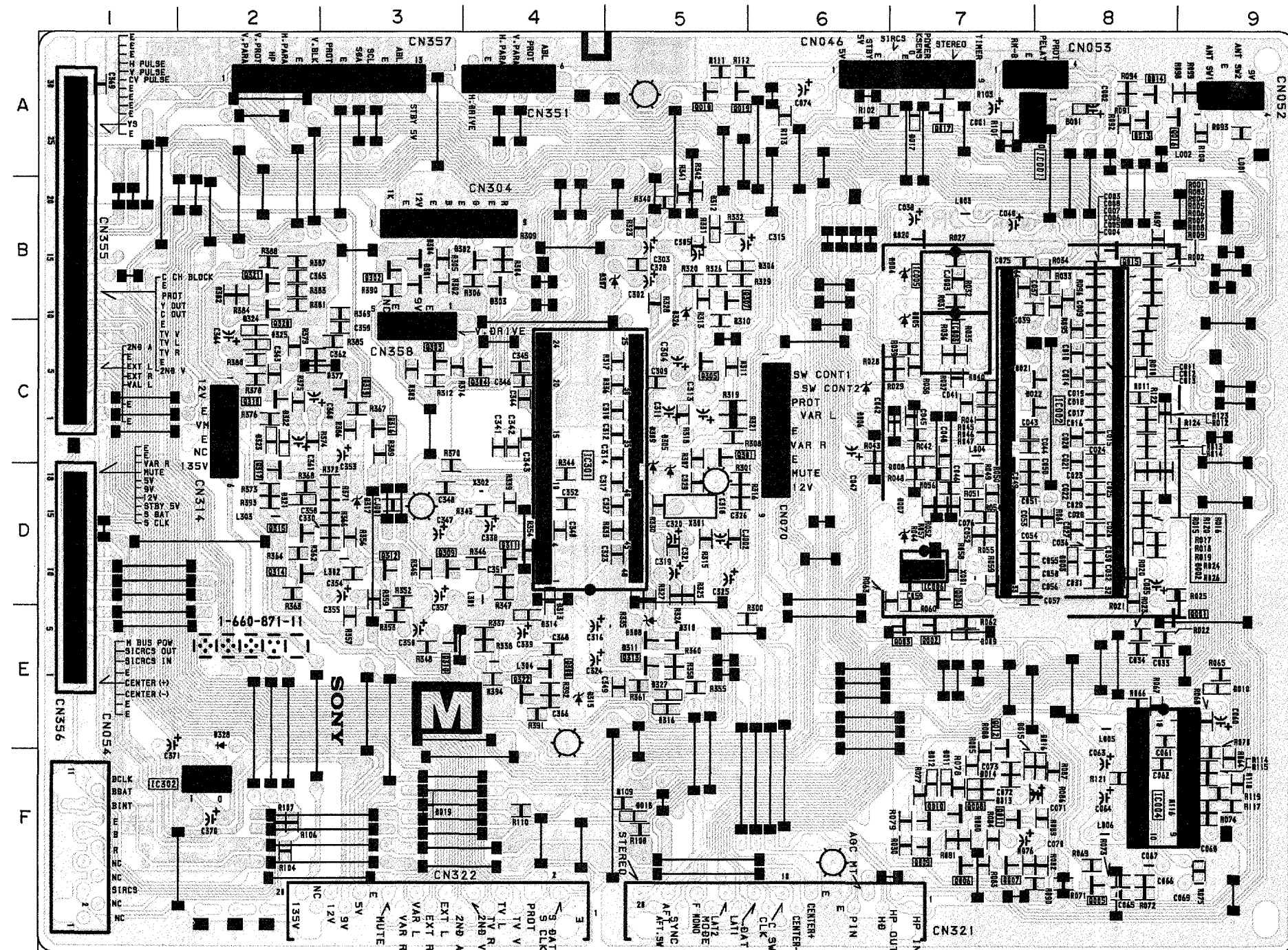
IC001	1	12.0	2	GND	3	5.0
IC002	1	0.8	15	0	29	0
	2	0.2	16	0	30	5.0
	3	4.8	17	0	31	5.0
	4	4.8	18	5.1	32	GND
	5	0	19	0	33	0
	6	5.2	20	0	34	2.6
	7	5.1	21	0	35	2.3
	8	0	22	0	36	5.1
	9	0	23	0	37	0
	10	5.1	24	0	38	5.1
	11	0	25	0	39	2.3
	12	0	26	5.1	40	GND
	13	0	27	5.1	41	5.1
	14	0	28	0	42	5.1
IC003	1	GND	3	GND	5	4.6
	2	GND	4	GND	6	4.6
	7	GND				
	8	GND				
IC004	1	0	5	0	9	GND
	2	5.0	6	0	10	GND
	3	0	7	0	11	GND
	4	NC	8	0.9	12	1.7
IC005	1	GND	3	GND	5	4.6
	2	5.1	4	GND	6	4.6
	7	GND				
	8	GND				
IC006	1	5.1	2	5.2	3	GND
IC301	1	4.4	11	0	21	0
	2	7.4	12	5.0	22	1.7
	3	5.4	13	5.7	23	1.7
	4	GND	14	5.7	24	1.6
	5	4.1	15	GND	25	5.4
	6	5.5	16	6.0	26	NC
	7	2.5	17	6.0	27	*
	8	9.0	18	6.0	28	8.9
	9	0	19	6.0	29	NC
	10	0	20	0	30	3.0
IC302	1	5.0	2	GND	3	9.0

	E	C	B
Q001	5.0	0.8	5.3
Q002	0	5.0	0.7
Q003	0	5.0	0
Q004	0.7	GND	0
Q005	3.4	5.0	4.2
Q006	0	5.2	0.7
Q007	5.2	0	5.1
Q008	0	0	5.1
Q009	GND	5.2	0
Q010	0	0	5.1
Q011	5.2	5.1	4.8
Q012	GND	5.0	0
Q013		5.0	
Q014	5.0		
Q015	GND		
Q016	5.0		
Q017	9.0	5.3	5.7
Q018	5.0	5.0	4.4
Q019	GND	0.2	0.7
Q301	2.7	GND	4.1
Q302	2.6	GND	1.9
Q303	2.6	GND	1.9
Q304	2.6	GND	1.9
Q305	GND	8.9	0
Q307	GND		0.7
Q308	3.1	GND	2.3
Q309	4.0	GND	3.4
Q310	6.8	9.0	7.4
Q311	5.4	9.0	6.1
Q312	1.5	7.6	2.2
Q313	0.9	9.0	0.4
Q314	0.9	6.0	1.5
Q315	5.3	9.0	6.0
Q316	0	9.0	0
Q317	8.2	3.7	7.6
Q318	0.7	5.9	1.4
Q319	GND	0.3	0
Q320	1.2	6.1	1.8
Q321	5.4	9.0	6.1
Q322	2.5	9.0	3.2

M BOARD WAVEFORMS



- M BOARD -



**M BOARD**

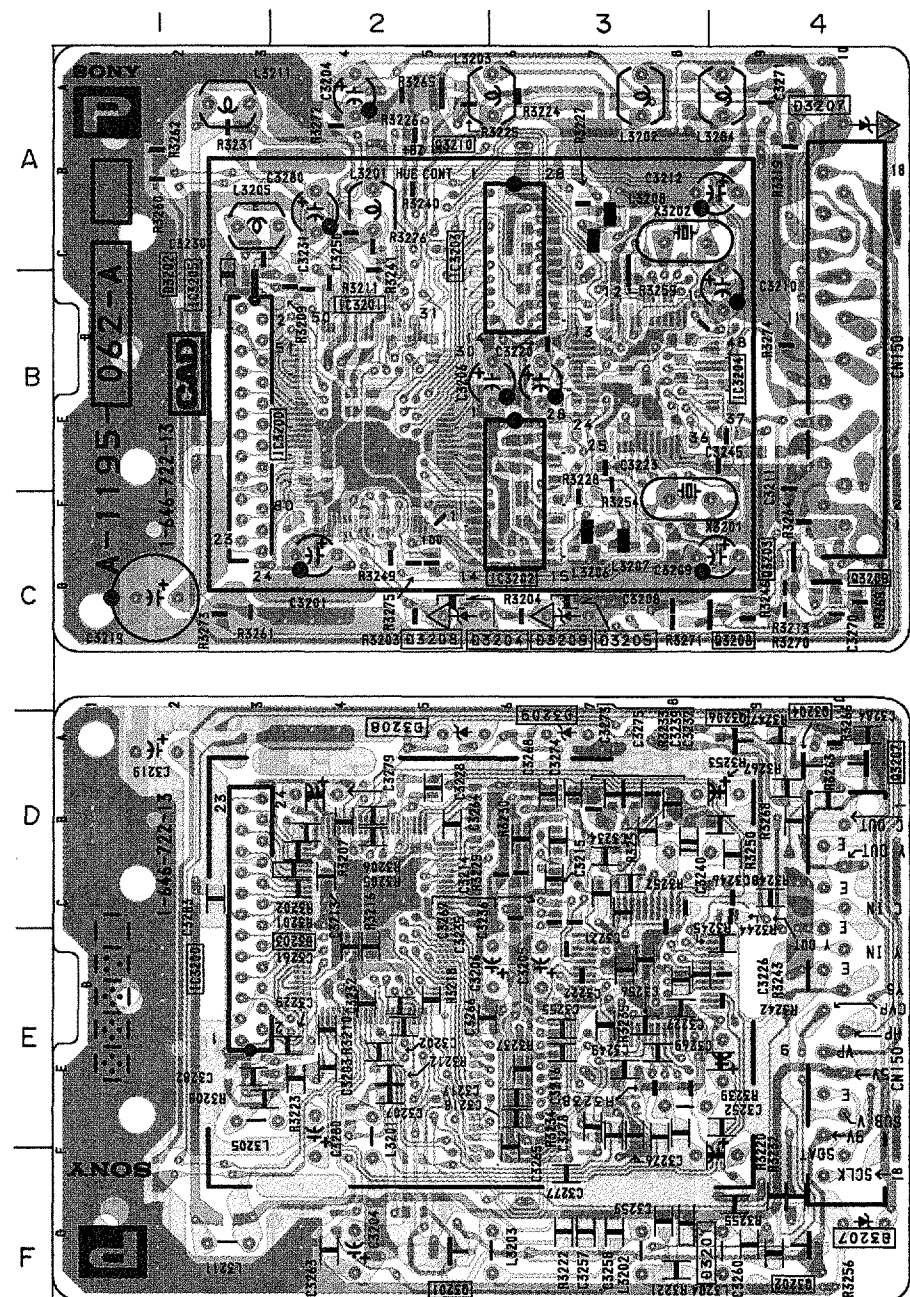
IC		Q319	C-3
IC001	A-8	Q320	C-2
IC002	C-8	Q321	B-2
IC003	C-7	Q322	E-4
IC004	F-8	DIODE	
IC005	B-7	D001	A-8
IC006	D-7	D002	D-8
IC301	D-4	D003	D-8
IC302	F-2	D004	B-7
TRANSISTOR		D005	C-7
Q001	E-9	D006	C-6
Q002	E-7	D007	D-7
Q003	E-7	D008	D-7
Q004	D-7	D009	E-7
Q005	F-8	D010	E-9
Q006	F-7	D011	F-7
Q007	F-7	D012	F-7
Q008	F-7	D013	F-7
Q009	F-7	D014	F-7
Q010	F-7	D015	F-7
Q011	F-7	D016	F-8
Q012	E-7	D017	A-7
Q013	A-8	D018	F-5
Q014	A-8	D019	F-3
Q015	B-8	D020	B-7
Q016	A-8	D305	C-5
Q017	A-7	D307	B-5
Q018	A-5	D308	E-5
Q019	A-5	D309	C-5
Q301	C-5	D310	E-5
Q302	B-3	D311	E-5
Q303	C-3	D312	B-6
Q304	C-4	D313	E-4
Q305	C-5	D314	E-4
Q307	B-5	D315	E-4
Q308	E-4	D316	E-5
Q309	D-3	D317	D-3
Q310	E-3	D321	D-2
Q311	D-4	D322	C-2
Q312	D-3	D323	C-2
Q313	E-5	D324	C-2
Q314	D-2	D325	C-2
Q315	D-2	D326	B-5
Q316	C-3	D327	E-5
Q317	D-2	D328	E-2
Q318	C-2		



— P BOARD —

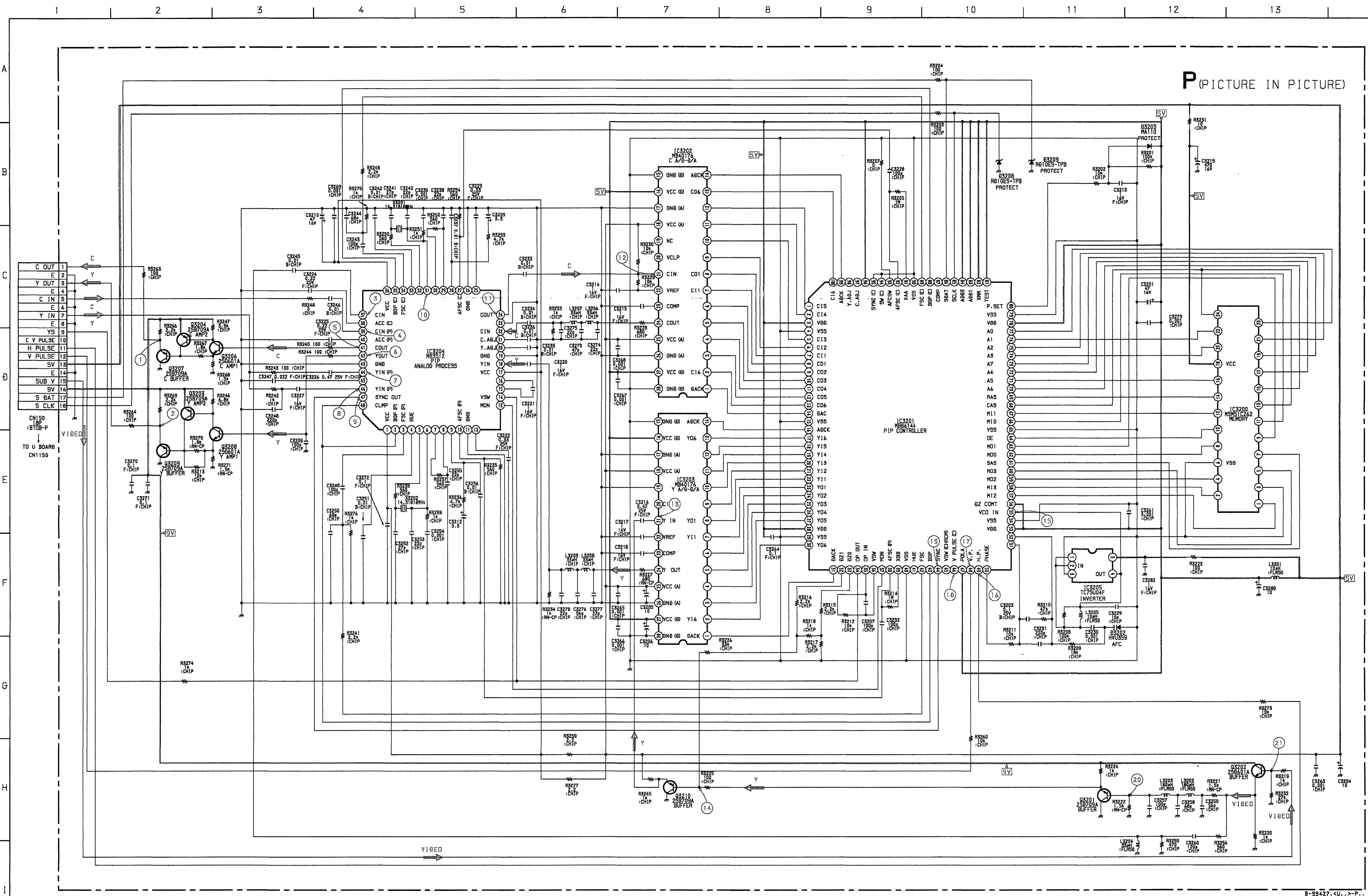
**P BOARD**

IC	
IC3200	E - 1
IC3201	B - 2
IC3202	C - 3
IC3203	B - 3
IC3204	B - 3
IC3205	B - 1
TRANSISTOR	
Q3201	F - 2
Q3202	F - 4
Q3203	C - 4
Q3204	D - 4
Q3206	D - 4
Q3207	D - 4
Q3208	C - 3
Q3209	C - 4
Q3210	A - 2
DIODE	
D3202	B - 1
D3203	D - 2
D3208	D - 2
D3209	D - 3

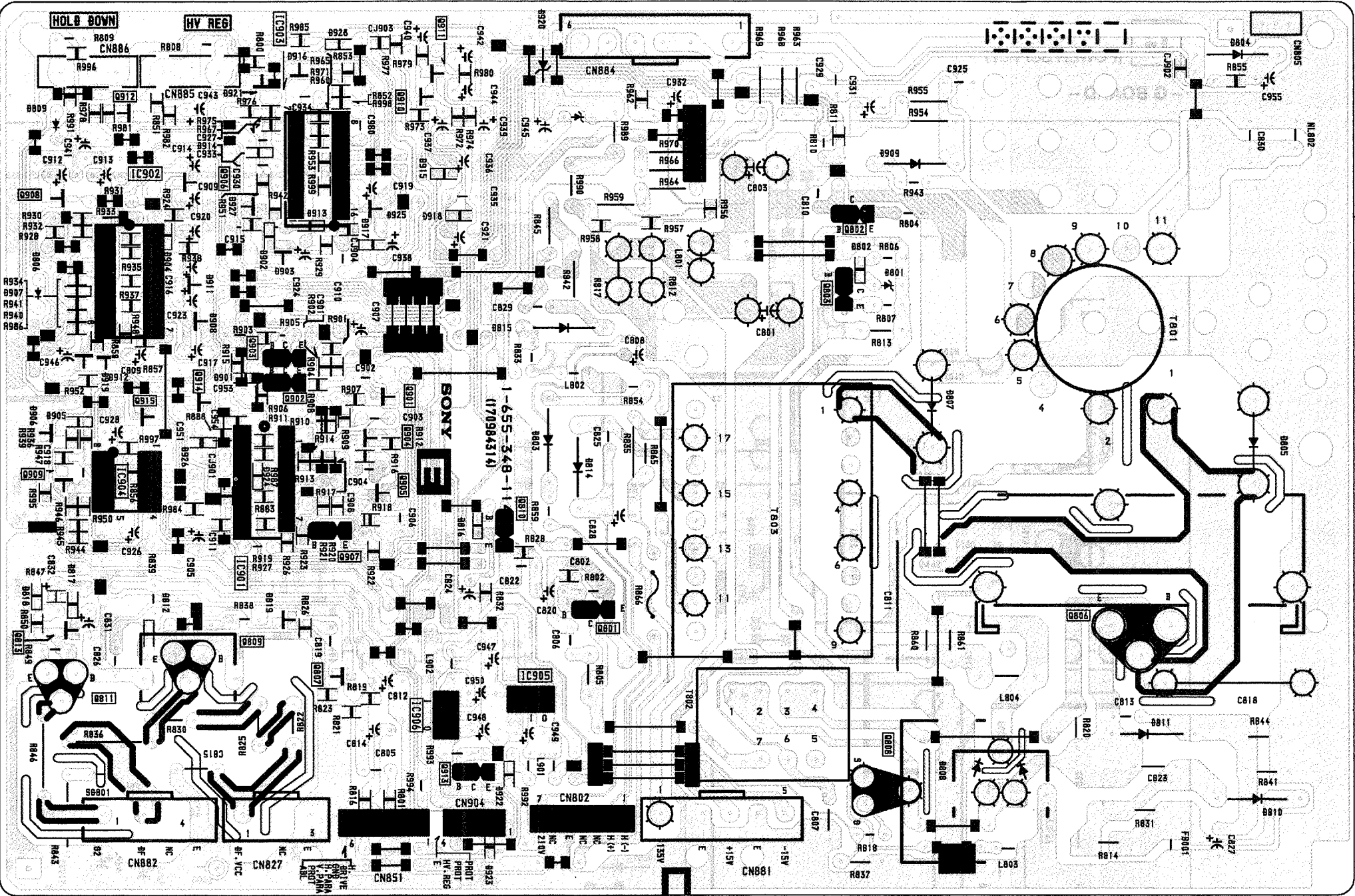


- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

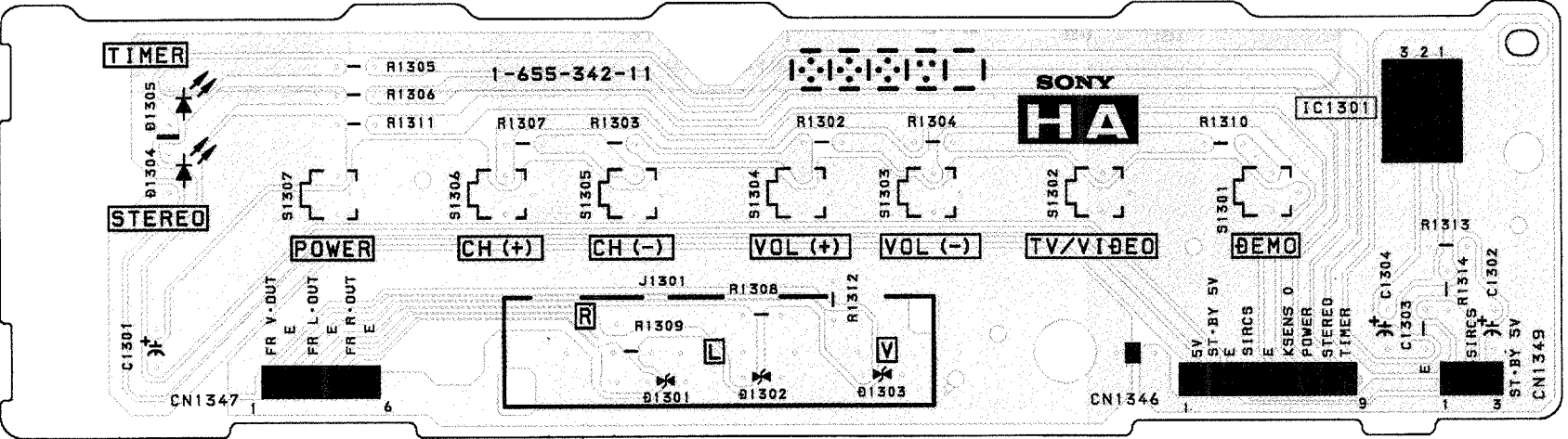








- HA BOARD -



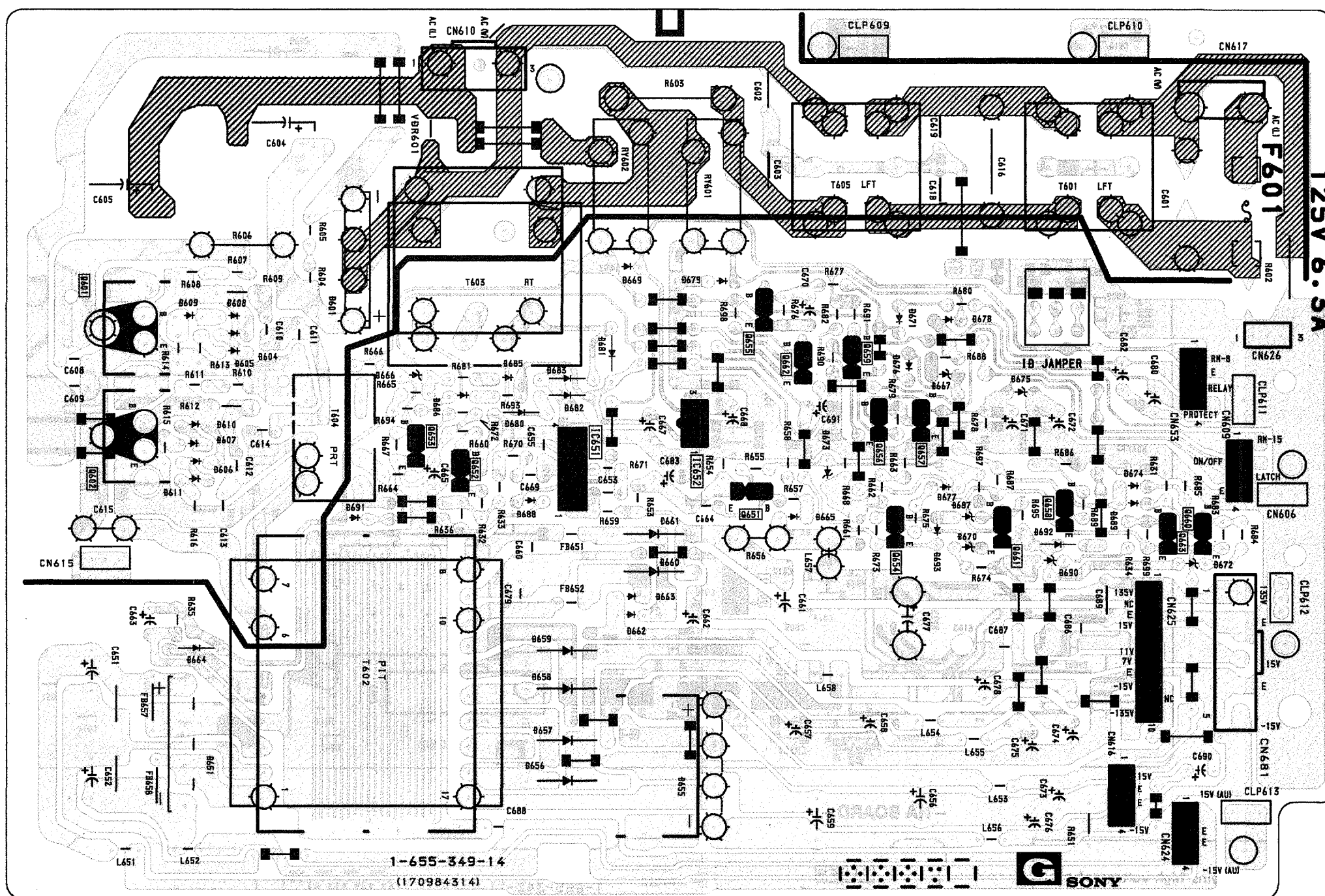
**NOTE:**  
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.



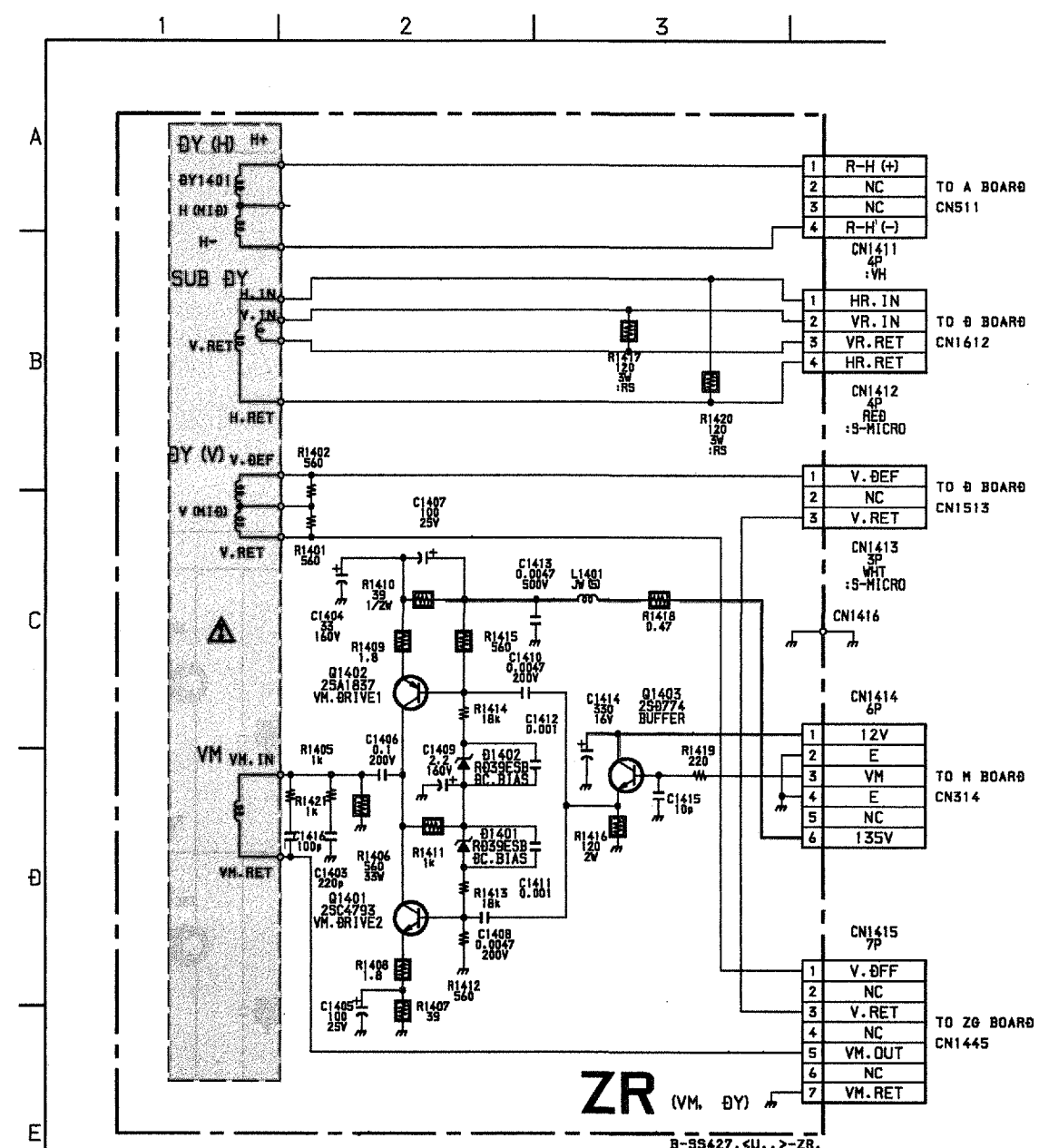
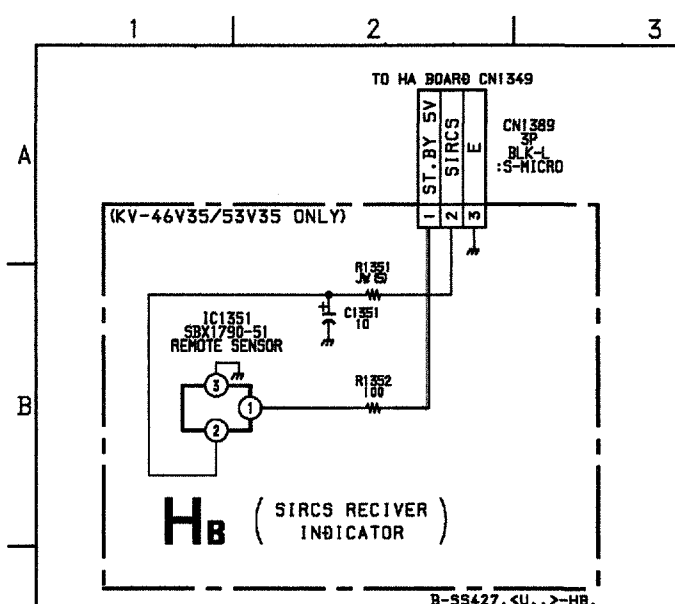
**G**

[POWER SUPPLY]

- G BOARD -





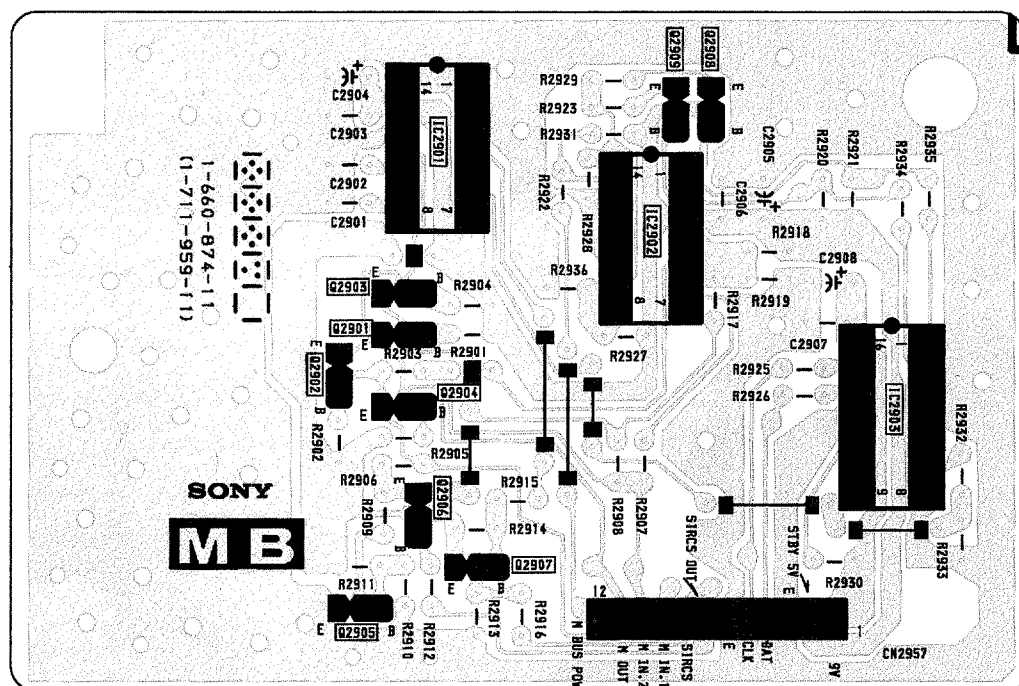


	E	C	B
Q1401	0	-0.5	0
Q1402	-1.0	-0.5	-0.9
Q1403	4.8	12.0	5.4

ALL VOLTAGES ARE IN V



**- K BOARD -**



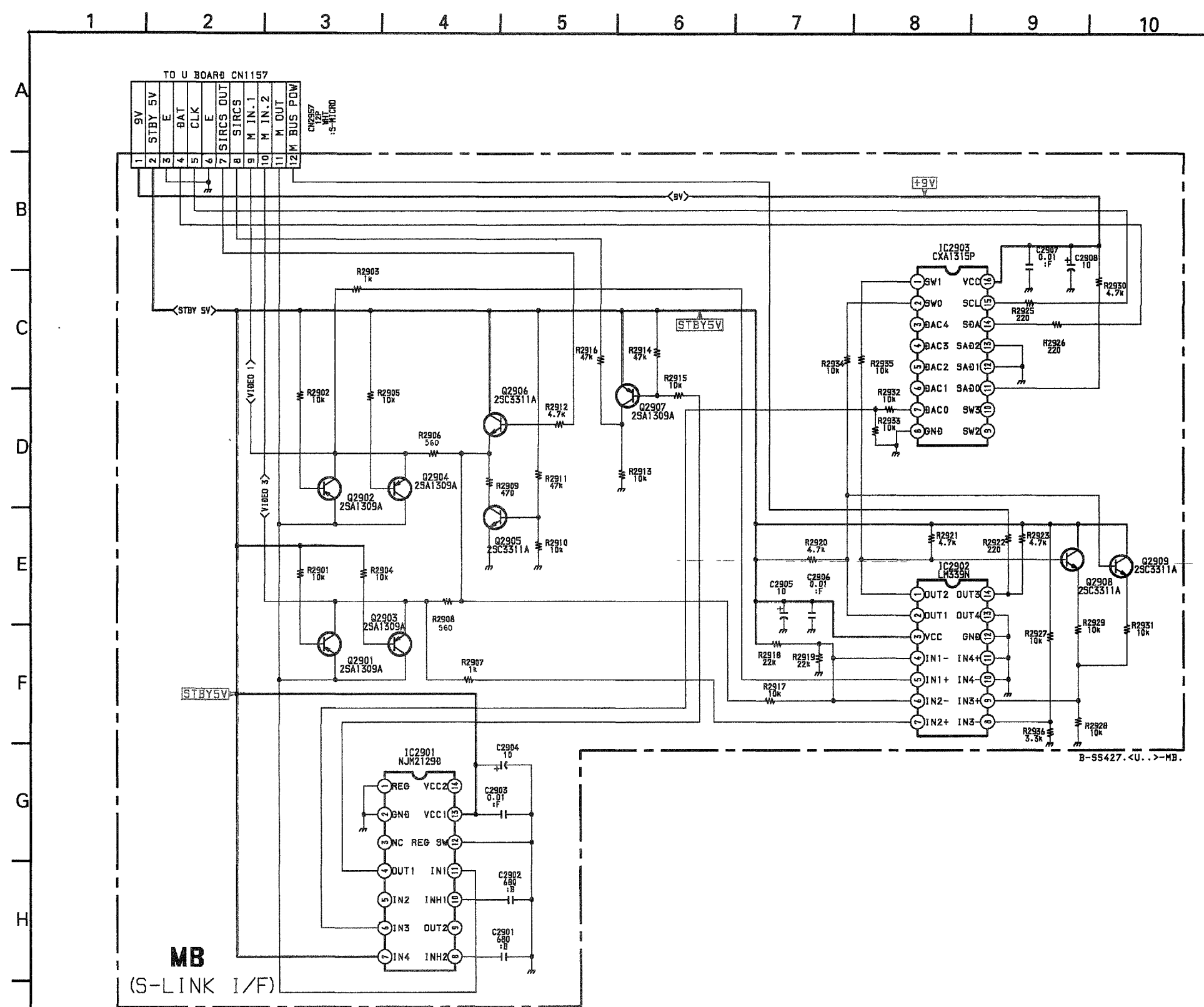
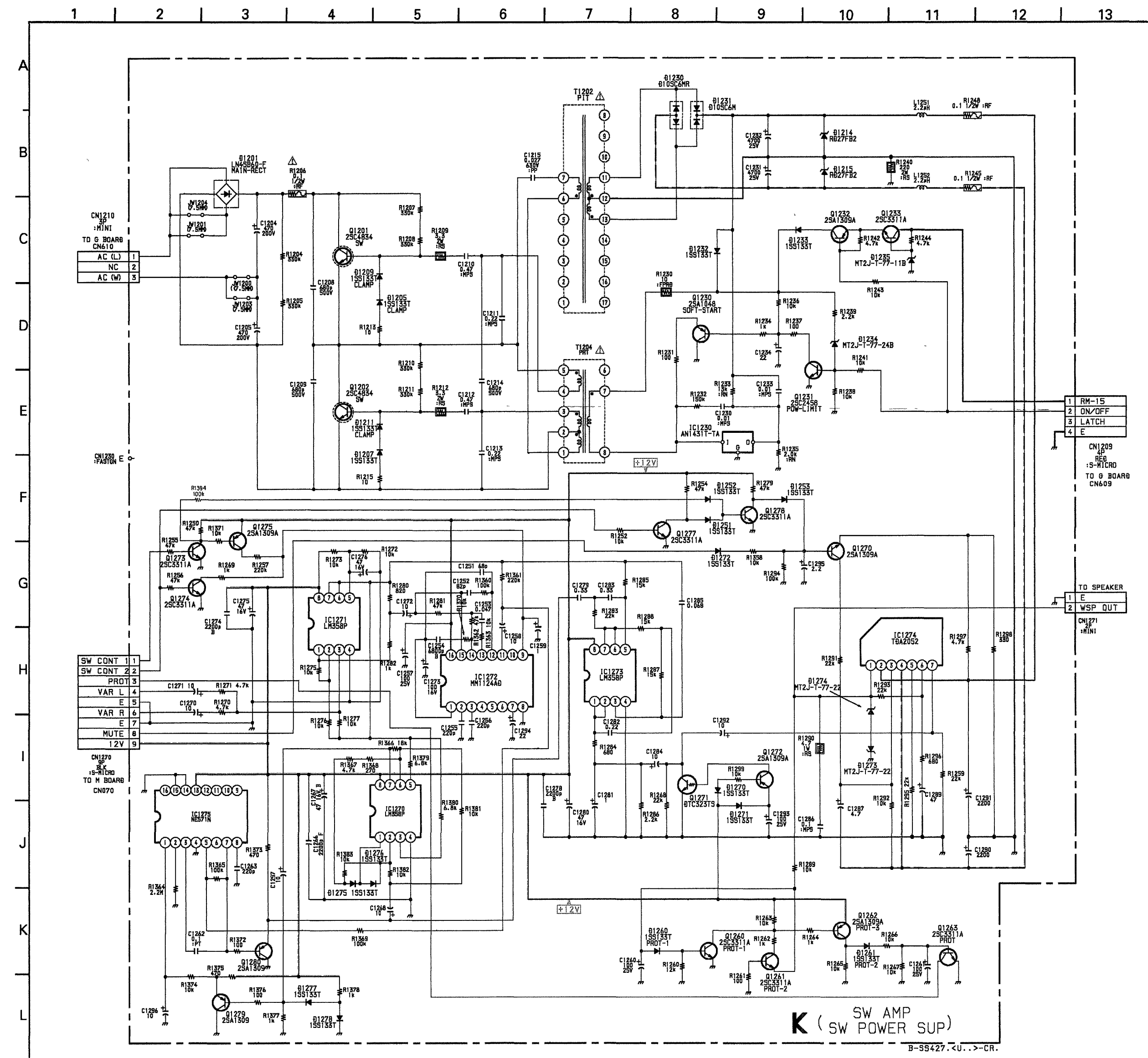
## IC

TRANSISTOR

DIODE

D1201	B - 1
D1205	D - 2
D1207	E - 2
D1209	D - 2
D1211	E - 2
D1214	B - 3
D1215	A - 3
D1230	C - 2
D1231	B - 3
D1232	D - 5
D1233	D - 5
D1234	E - 5
D1235	E - 5
D1251	B - 9
D1252	B - 9
D1253	B - 8
D1260	D - 8
D1261	D - 9
D1270	B - 7
D1271	B - 7
D1272	C - 10
D1273	B - 9
D1274	B - 8
D1275	C - 6
D1276	C - 6
D1277	C - 7
D1278	D - 7





**K BOARD**

REF.	Pin No.	VOLTAGE
IC1230	(IN) I	15.0
	(OUT) O	2.5
	(GND) G	0.0
IC1270	(IN) I	6.0
	(OUT) O	6.0
	(GND) G	6.0
IC1271	(IN) I	6.0
	(OUT) O	6.0
	(GND) G	6.0
IC1272	(IN) I	6.1
	(OUT) O	6.1
	(GND) G	6.1
IC1273	(IN) I	6.0
	(OUT) O	6.0
	(GND) G	6.0
IC1274	(IN) I	0.0
	(OUT) O	-12.4
	(GND) G	0.0

**K BOARD**

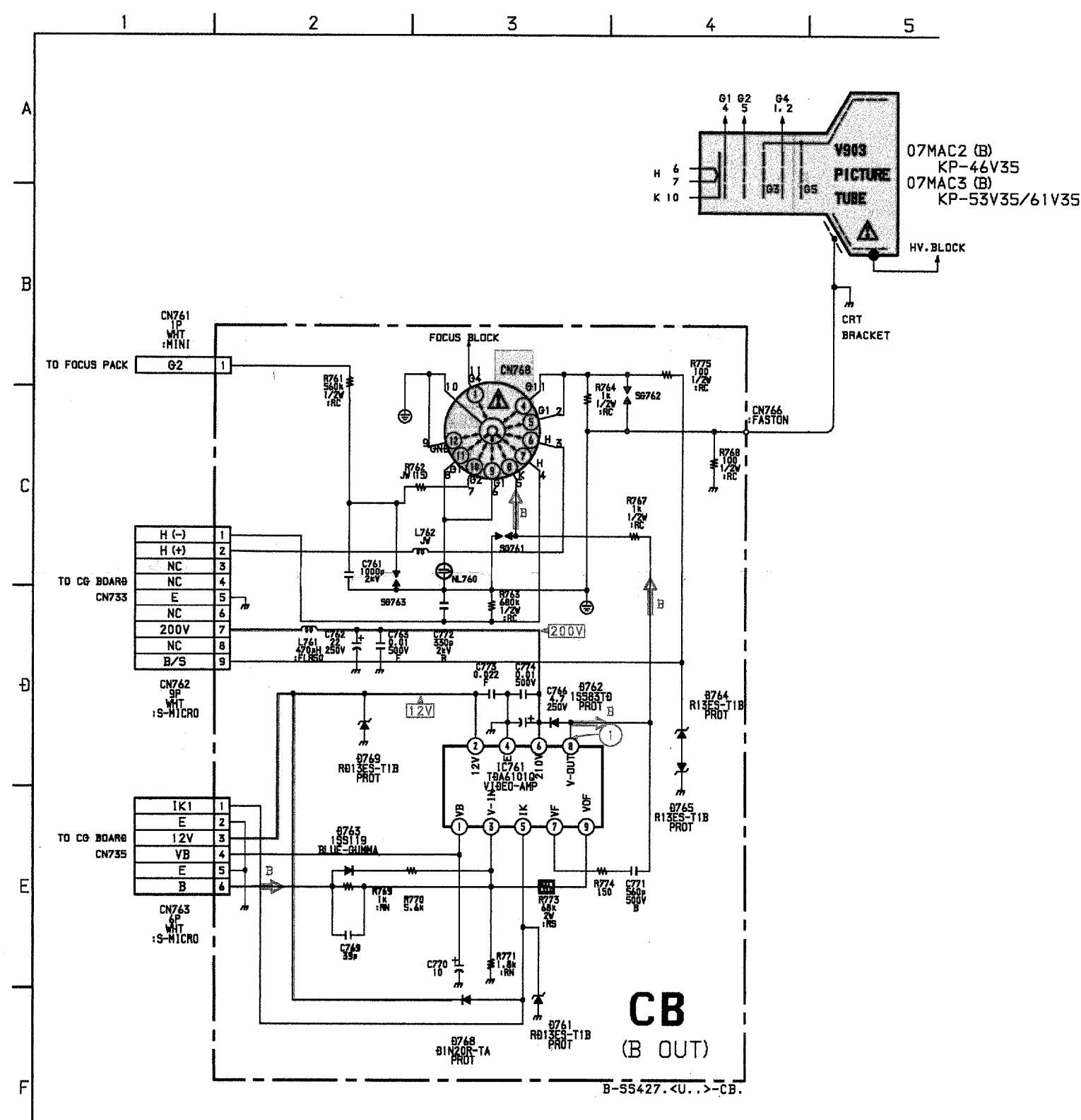
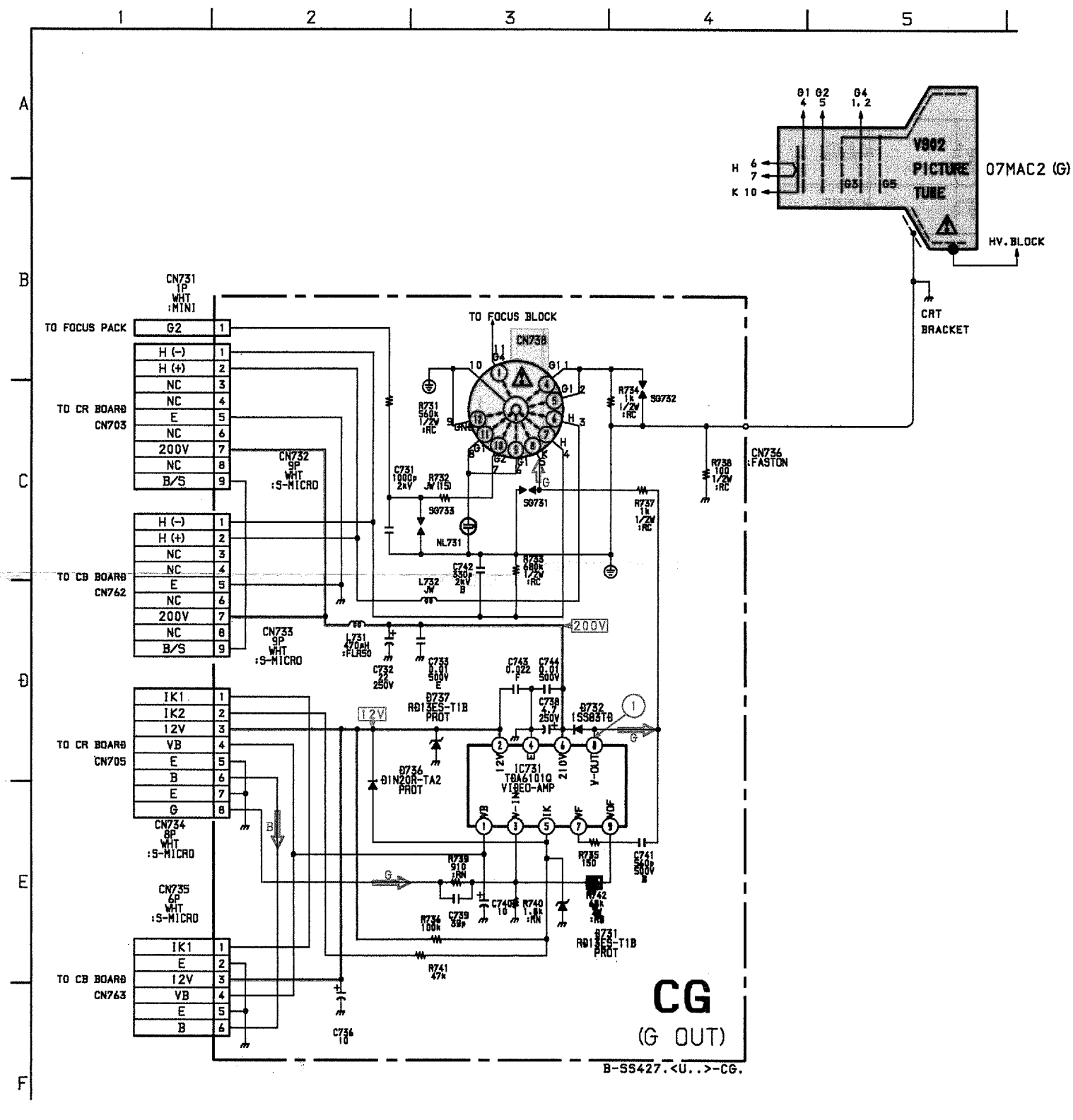
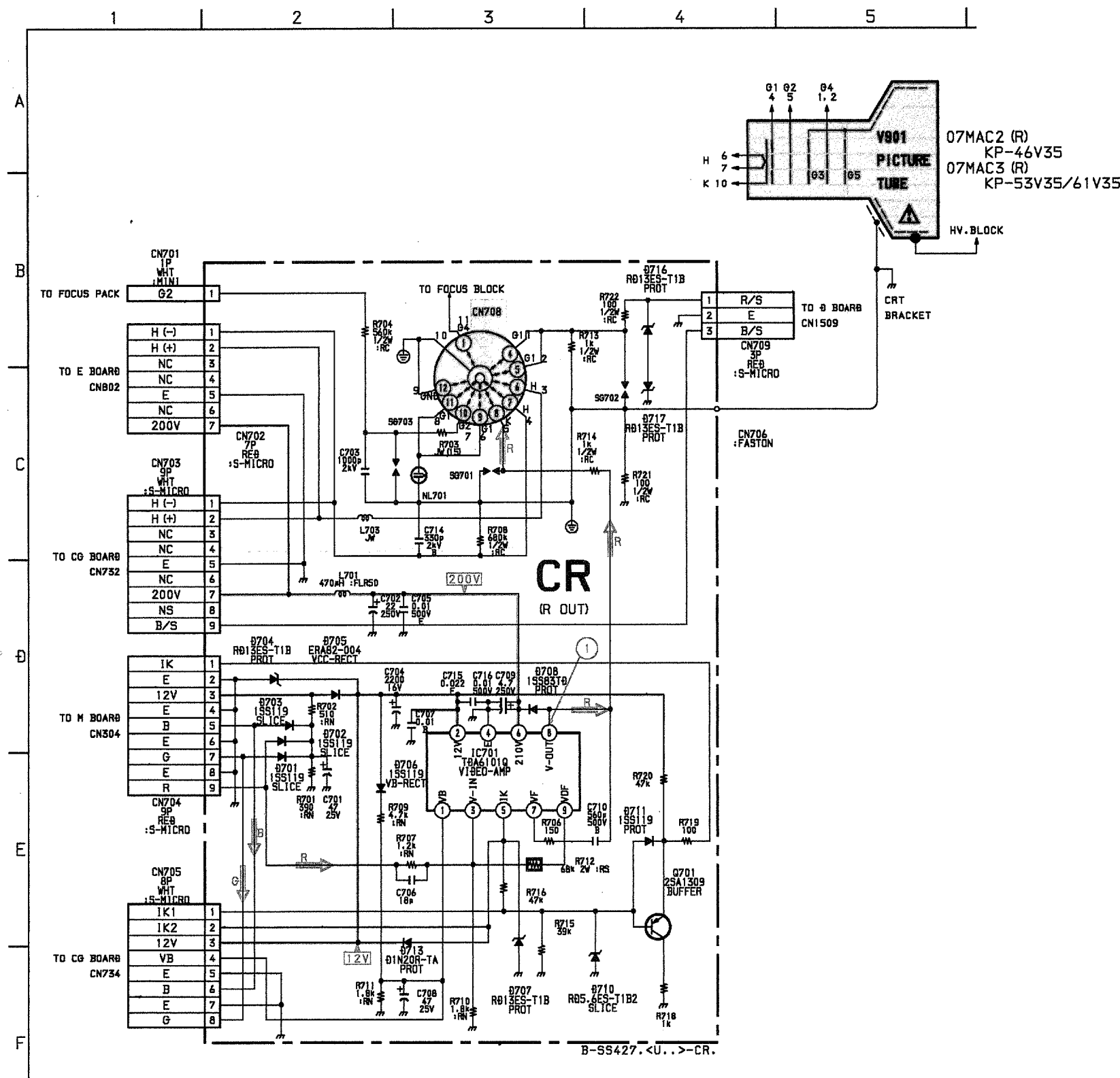
REF.	VOLTAGE	REF.	VOLTAGE
Q1201	E 155.6	Q1270	C 1.0
B 309.1		C 0.9	
C 154.3		B 0.4	
Q1202	C 155.6	Q1271	C 0.0
B -1.4		B -0.8	
E 14.5		E 11.8	
Q1230	B 17.1	Q1272	C -0.8
C 17.2		B 11.1	
Q1231	B 0.1	C 12.0	
E 10.1		B 0.0	
Q1232	C 10.1	C 0.0	
B 9.4		B 0.6	
E 10.1		C 0.1	
Q1233	C 18.8	Q1275	B 11.9
B 10.7		C 0.1	
C 12.0		Q1277	B 0.7
Q1260	B 0.0	C 0.0	
E 0.0		Q1278	B 0.7
Q1261	C 12.0	E 0.9	
B 0.0		Q1279	B 0.3
C 0.0		E 8.5	
Q1262	B 12.0	B 7.8	
C 4.4			
Q1263	B 0.0		

**MB BOARD**

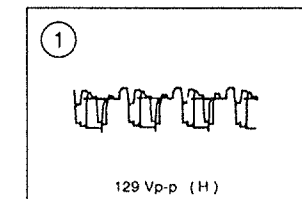
REF.	Pin No.	VOLTAGE
IC2901	(IN) I	5.0
	(OUT) O	0.3
	(GND) G	0.5
IC2902	(IN) I	0.8
	(OUT) O	0.0
	(GND) G	0.0
IC2903	(IN) I	0.1
	(OUT) O	0.1
	(GND) G	1.2
IC2904	(IN) I	0.1
	(OUT) O	0.1
	(GND) G	1.3
IC2905	(IN) I	0.1
	(OUT) O	0.1
	(GND) G	0.5
IC2906	(IN) I	8.9
	(OUT) O	4.4
	(GND) G	4.5

**MB BOARD**

REF.	VOLTAGE
Q2901	C 0.0
B 5.0	
Q2902	C 0.0
B 5.0	
Q2903	C 0.0
B 5.0	
Q2904	C 0.0
B 5.0	
Q2905	C 0.6
B 0.0	
Q2906	B 0.0
C 0.0	
Q2907	B 5.0
E 0.0	
Q2908	B 0.1
E 0.0	
Q2909	B 0.1



# • CR BOARD WAVEFORM



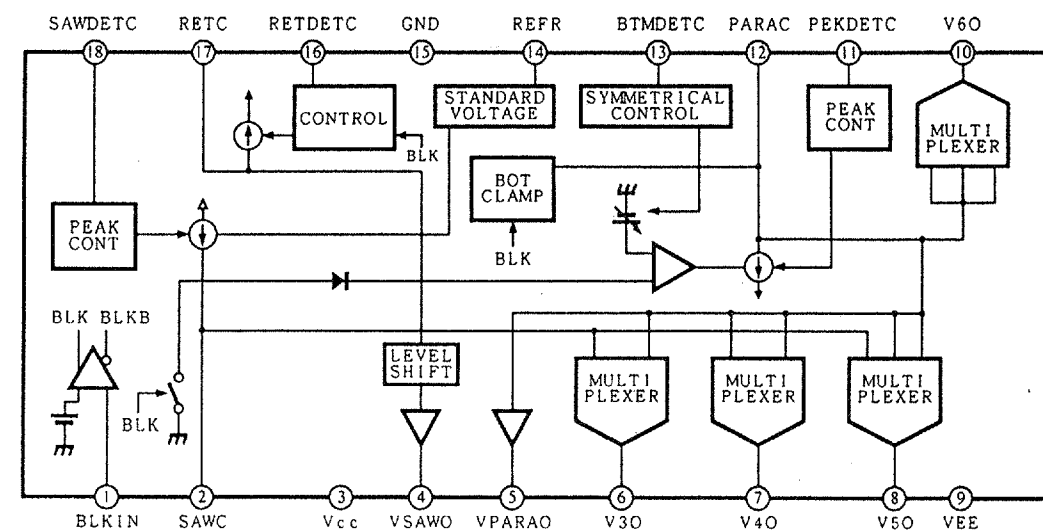
## CR BOARD IC VOLTAGE LIST

ALL VOLTAGES ARE IN V								
IC701	1	3.2	3	3.0	5	8.2	7	171.5
	2	12.0	4	GND	6	200	8	171.6

## CR BOARD TRANSISTOR VOLTAGE LIST

	E	C	B
Q701	3.3	0.3	3.7

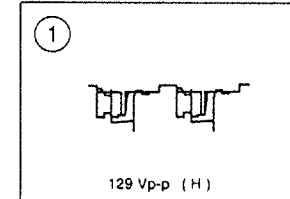
## CR BOARD IC701 TDA6101Q



# CG BOARD IC VOLTAGE LIST

ALL VOLTAGES ARE IN V								
IC731	1	3.1	3	2.9	5	9.6	7	173.8
	2	12.0	4	GND	6	200	8	175.4

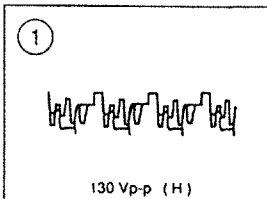
# • CG BOARD WAVEFORM



## CB BOARD IC VOLTAGE LIST

ALL VOLTAGES ARE IN V								
IC761	1	3.1	3	3.0	5	4.3	7	147.2
	2	12.0	4	GND	6	200	8	149.7

# • CB BOARD WAVEFORM

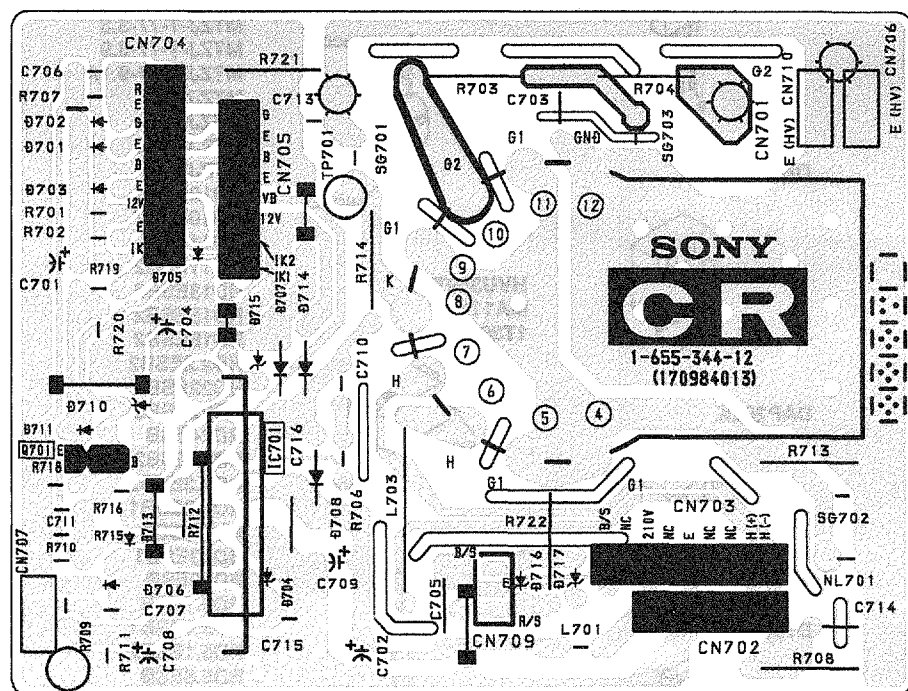


[R OUT]

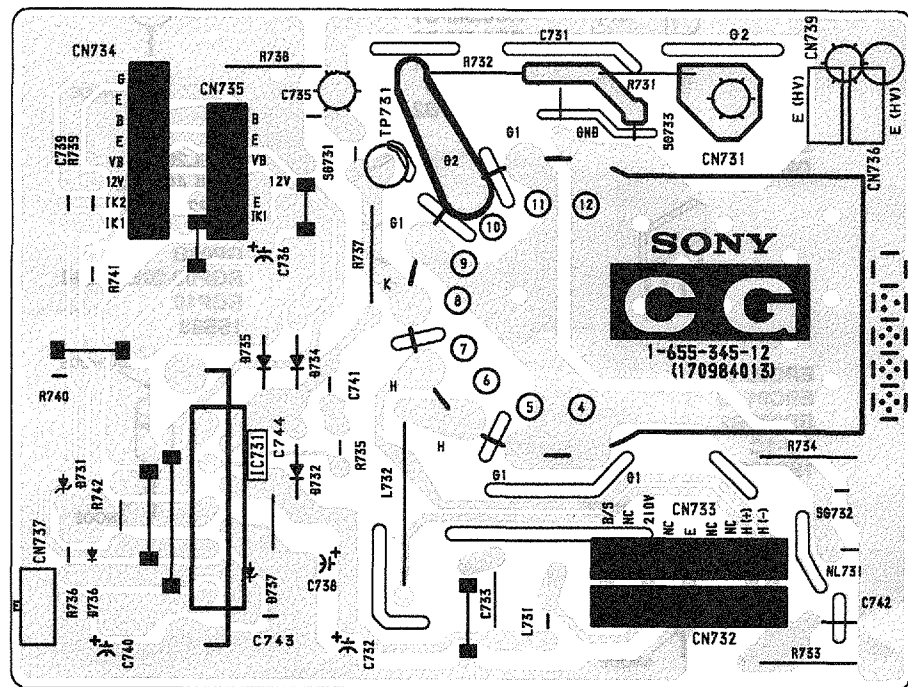
[G OUT]

[B OUT]

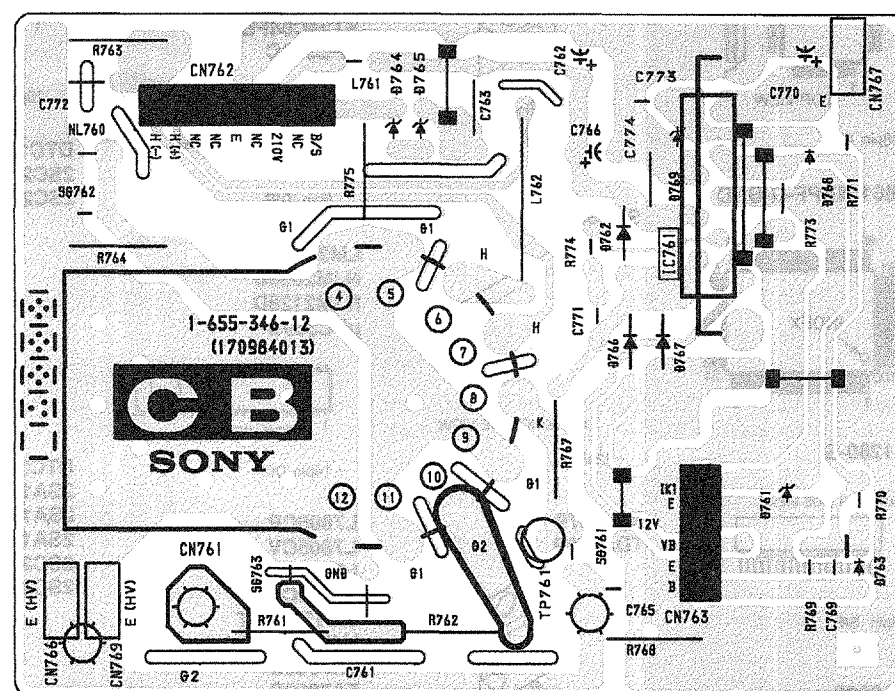
**- CR BOARD -**



**- CG BOARD -**

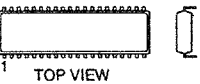


**- CB BOARD -**



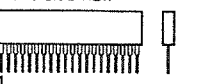
4-4. SEMICONDUCTORS

AN1431T  
CXA1315P  
MB40176PF-G-BND-EF  
NE571N

  
TOP VIEW

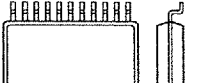
16pin DIP

CAT51C262-ZS  
MSM51C262-ZS

  
MARKING SIDE VIEW

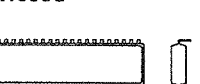
24pin SIP

CXA1315P  
HD14053BFP

  
TOP VIEW

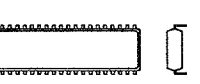
16pin SOP

CXA1477AS  
CXA1855S

  
TOP VIEW


48pin DIP

CXP85112B-613S  
CXP85332A-046S  
CXP85340A-060S

  
TOP VIEW

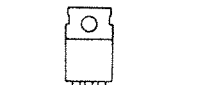
64pin DIP

LA7905CT  
MC7905CT

  
TOP VIEW

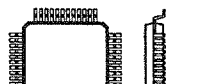
3pin DIP

LM7912CT  
MC7912CT

  
TOP VIEW


3pin DIP

MB3512PFQ

  
TOP VIEW

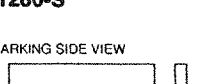
48pin QFP

MB86144BPF-G-BND

  
INDEX

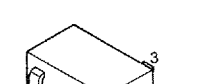
80pin QFP

MN1280-S

  
MARKING SIDE VIEW

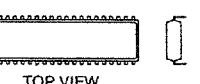
3pin SIP

MN1382S

  
TOP VIEW

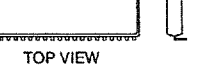
18pin DIP

PA0053B  
Z8622812PSC

  
TOP VIEW

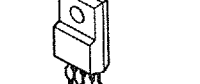
18pin DIP

PM0002B

  
TOP VIEW


42pin DIP

PQ05RF1  
PQ09RA1

  
TOP VIEW

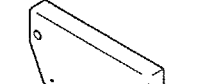
12pin DIP

SBX1780-51  
SBX1790-51

  
TOP VIEW


22pin DIP

STK392-010

  
MARKING SIDE VIEW

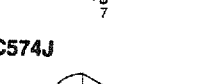
22pin DIP

STV9379  
TDA2052

  
TOP VIEW

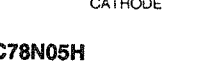
7pin DIP

μPC574J

  
TOP VIEW

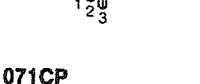
3pin DIP

μPC78N05H

  
TOP VIEW


3pin DIP

XR1071CP

  
TOP VIEW

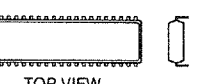
32pin DIP

LM358P  
M5218AP  
NJM4558D  
ST24C01FB6  
ST24C04FB6  
μPC358C

  
TOP VIEW


8pin DIP

LM339N  
NJM2058D  
NJM2129D  
μPC339C

  
TOP VIEW


14pin DIP

L7805CP  
L7805CV  
L7809CP  
L7812CV  
MCT7812CT  
NJM78M09FA  
TA7805S  
TA7809S

  
TOP VIEW


5pin CHIP

TC7SU04F

  
TOP VIEW


5pin DIP

TDA6101Q

  
MARKING SIDE VIEW

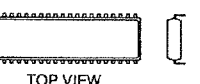
9pin ZIP

TDA7265

  
TOP VIEW


9pin ZIP

TDA8424

  
TOP VIEW


20pin DIP

DTC124ES  
2SC2458T  
2SC2485-YGR

  
TOP VIEW


14pin DIP

DTC323TS  
2SA1048T  
2SA1175-HFE  
2SA1309A  
2SC2785-HFE  
2SC3311A

  
LETTER SIDE

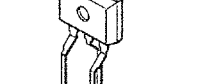
14pin DIP

IRF1640LF

  
TOP VIEW

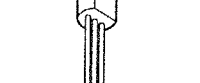
5pin DIP

2SA1013-O  
2SA1208-S

  
TOP VIEW

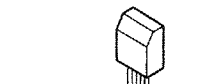
3pin DIP

2SA1037K  
2SA1162-G  
2SB709A  
2SC2412K  
2SD601A-Q

  
TOP VIEW


3pin DIP

2SA1221-L  
2SB733-34  
2SD734-4  
2SD774-34  
2SD774-4

  
TOP VIEW


3pin DIP

2SA1492M-OPY

  
TOP VIEW

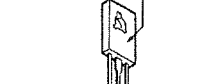
3pin DIP

2SA1837  
2SC4793

  
TOP VIEW


3pin DIP

2SB649A-C  
2SC2688-LK

  
LETTER SIDE


3pin DIP

2SC2878-AB

  
TOP VIEW


3pin DIP

2SC4632LS-CB7  
2SD1887-CA

  
TOP VIEW


3pin DIP

2SC4834M

  
TOP VIEW

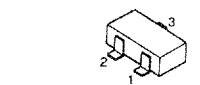
3pin DIP

2SD2348LBSONY

  
TOP VIEW

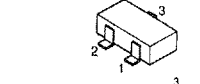
3pin DIP

DAN202K

  
TOP VIEW


3pin DIP

DAP202K

  
TOP VIEW


3pin DIP

D10SC6M

  
TOP VIEW


3pin DIP

D10SC6MR

  
TOP VIEW


3pin DIP

D1NL40  
D2L40

  
TOP VIEW


3pin DIP

ERC06-15S  
ERC91-02  
RD27FB2  
RU-1C  
1SS133

  
TOP VIEW

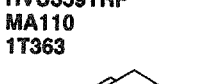
3pin DIP

ERC38-06  
V06C  
V09G  
V19E

  
TOP VIEW


3pin DIP

HVU359TRF  
MA110  
1T363

  
TOP VIEW

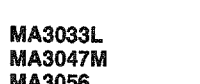
3pin DIP

HZT33-02

  
TOP VIEW


3pin DIP

MA3033L  
MA3047M  
MA3056  
RD13M-B3  
RD3.3M-B1  
RD3.9M-B1  
RD4.7M-B2  
RD5.1M-B2  
RD5.6M-B  
RD5.6M-B2

  
TOP VIEW

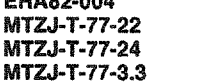
3pin DIP

D1NL20  
D1NL40-TR2  
EGP20G  
EL1Z  
GP08D  
RGP02-20EL-6394  
RGP10  
1SS83

  
TOP VIEW

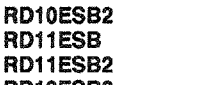
3pin DIP

D1N20R  
ERA82-004  
MTZJ-T-77-22  
MTZJ-T-77-24  
MTZJ-T-77-3.3  
MTZJ-T-77-3.9  
MTZJ-T-77-9.1A  
MTZJ-11B  
MTZJ-13  
MTZJ-3.6A  
MTZJ-33A  
RD10ESB  
RD10ESB2  
RD11ESB  
RD11ESB2  
RD13ESB2  
RD15ESB2  
RD18ESB2  
RD2.2ESB2  
RD22ESB  
RD22ESB3  
RD24ESB  
RD24ESB2  
RD3.3ESB2  
RD3.6ESB1  
RD3.9ESB  
RD39ESB1  
RD39ESB  
RD5.1ESB  
RD5.1ESB1  
RD5.1ESB2  
RD5.6ESB  
RD5.6ESB2  
RD8.2ESB2  
RD9.1ESB  
1SS119-25  
11EQS04  
11ES2

  
TOP VIEW

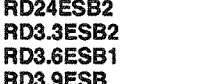
3pin DIP

D2S4MF

  
TOP VIEW

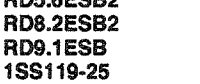
3pin DIP

D8LC40

  
TOP VIEW


3pin DIP

D1NL40  
D2L40

  
TOP VIEW

3pin DIP

ERC06-15S  
ERC91-02  
RD27FB2  
RU-1C  
1SS133

  
TOP VIEW

3pin DIP

- 99 -

- 100 -

## SECTION 5

### EXPLODED VIEWS

**NOTE:**

• Items with no part number and no description are not stocked because they are seldom required for routine service.

• The construction parts of an assembled part are indicated with a collation number in the remark column.

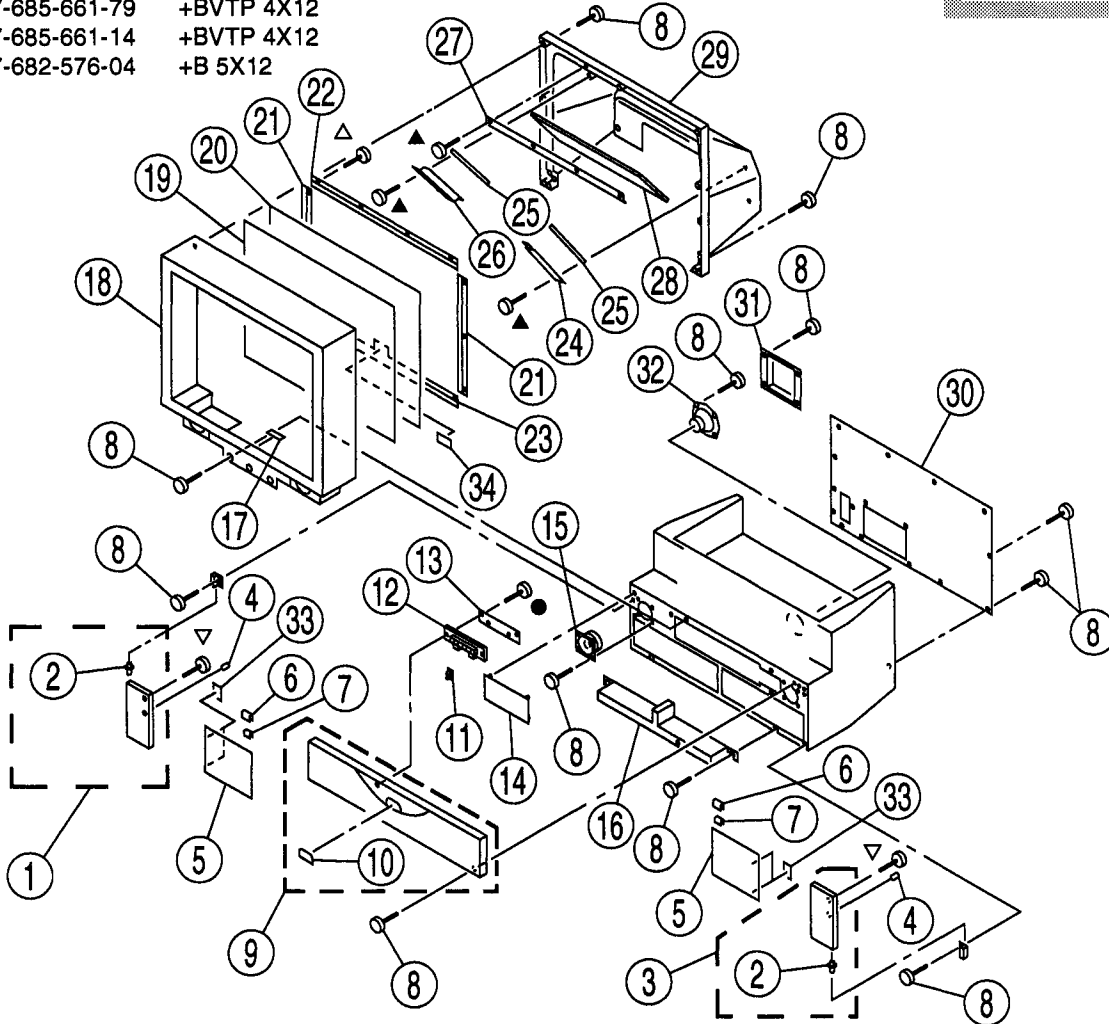
• Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

#### 5-1. COVER (KP-46V35/53V35)

- : 7-685-648-79 +BVTP 3X12
- ▲ : 7-685-661-79 +BVTP 4X12
- △ : 7-685-661-14 +BVTP 4X12
- ▽ : 7-682-576-04 +B 5X12

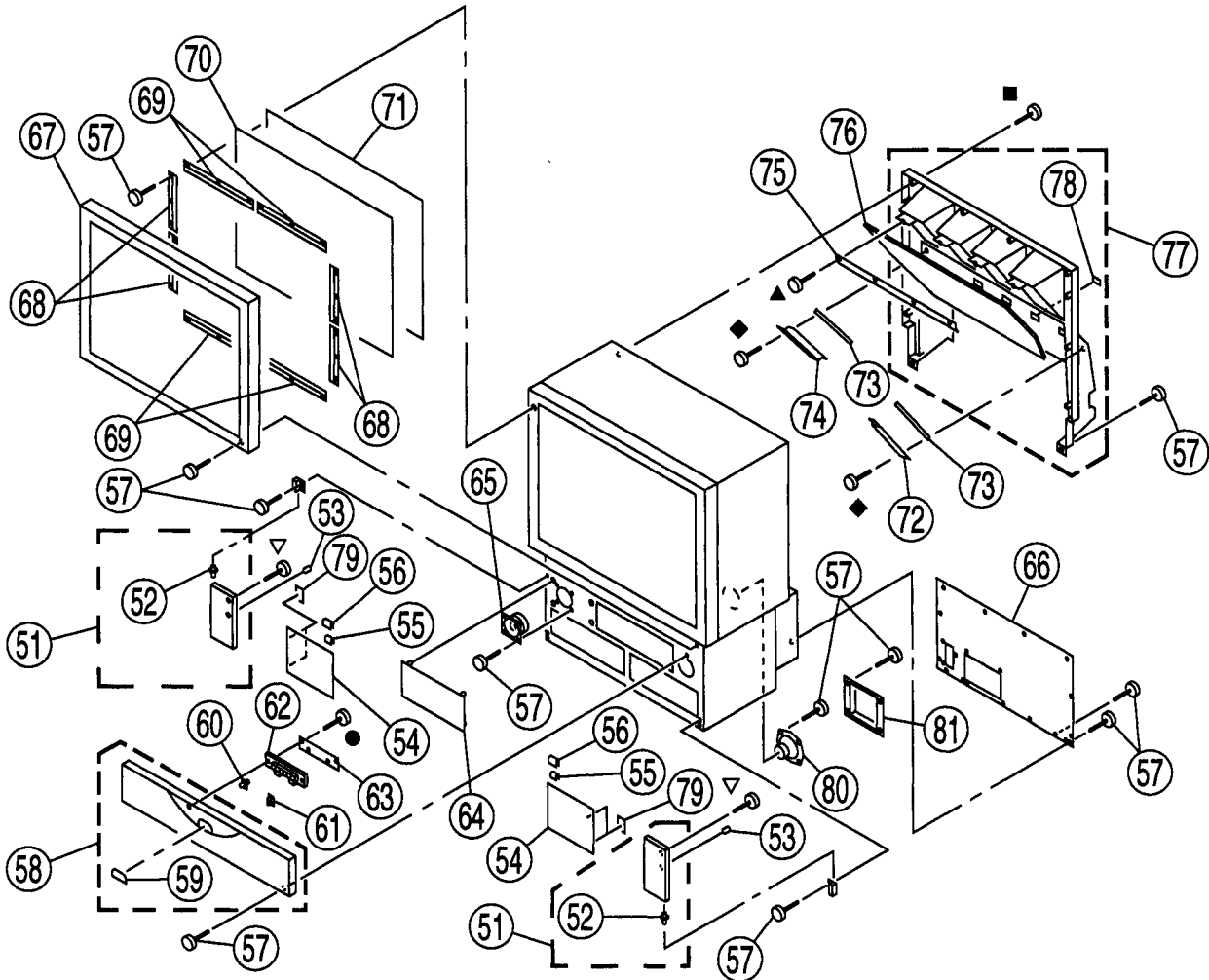


REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-4033-667-1	DOOR (L) ASSY, RACK		2	20	4-036-469-01 PLATE (F), DIFFUSION (KP-53V35)	
2	4-048-634-01	SHAFT				4-048-205-11 PLATE (F), DUFFUSION (KP-46V35)	
3	X-4033-668-1	DOOR (R) ASSY, RACK		2	21	*4-048-152-01 HOLDER (S), SCREEN (KP-46V35)	
4	4-036-901-01	SCREW				*4-048-152-11 HOLDER (S), SCREEN (KP-53V35)	
5	4-048-790-01	GLASS (53), DOOR		22	*4-048-159-01	HOLDER (L), SCREEN (KP-46V35)	
6	4-038-384-01	CATCHER, MAGNET				*4-048-159-11 HOLDER (L), SCREEN (KP-53V35)	
7	4-038-385-01	SPACER		23	*4-048-159-21	HOLDER (L), SCREEN (KP-46V35)	
8	4-041-164-11	SCREW (4X20), TAPPING				*4-048-159-31 HOLDER (L), SCREEN (KP-53V35)	
9	X-4032-613-1	PANEL ASSY, CONTROL		10	24	*4-049-096-01 HOLDER (RIGHT), SIDE	
10	4-048-000-01	DOOR, CONTROL		25	*4-049-098-01	CUSHION	
11	4-047-998-01	GUIDE, LIGHT, LED		26	*4-049-097-01	HOLDER (LEFT), SIDE	
12	4-048-001-01	BUTTON, MULTI		27	*4-037-351-01	HOLDER, MIRROR	
13	*A-1372-112-A	HA BOARD, COMPLETE		28	*4-048-741-01	MIRROR, REFLECTION	
14	4-048-335-01	GRILLE, SPEAKER		29	*4-048-639-01	COVER, MIRROR (KP-46V35)	
15	1-505-378-11	SPEAKER (10CM)				*4-048-640-01 COVER, MIRROR (KP-53V35)	
16	4-048-247-01	PANEL, FRONT ORNAMENT		30	*4-048-793-01	PLATE (53), REAR (KP-53V35)	
17	*A-1372-111-A	HB BOARD, COMPLETE				*4-048-794-01 PLATE (46), REAR (KP-46V35)	
18	X-4032-998-1	BEZNET ASSY (46V) (KP-46V35)		31	*4-054-051-01	COVER, SPEAKER	
	X-4032-999-1	BEZNET ASSY (53V) (KP-53V35)		32	1-505-377-11	SPEAKER (13CM)	
19	4-036-466-01	PLATE (L), DIFFUSION (KP-53V35)		33	4-039-009-02	CUSHION, GLASS	
	4-037-360-11	PLATE (L), DIFFUSION (KP-46V35)		34	3-551-305-21	CUSHION, PANEL	



**5-2. COVER (KP-61V35)**

- : 7-685-648-79 +BVTP 3X12
- : 7-685-663-79 +BVTP 4X16
- ▲ : 7-685-661-79 +BVTP 4X12
- ◆ : 7-685-666-79 +BVTP 4X30
- ▽ : 7-682-576-04 +B 5X12



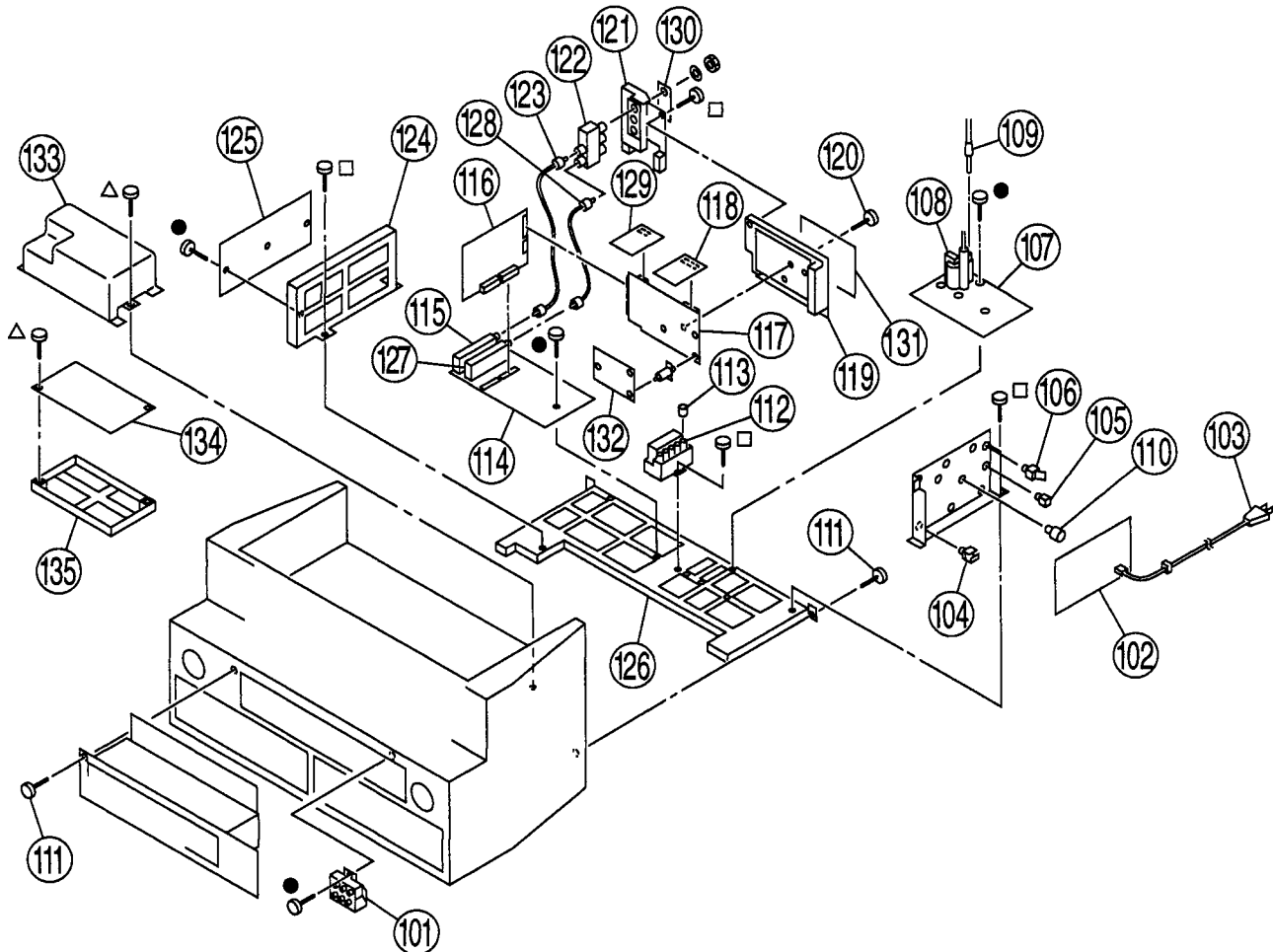
REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	X-4033-663-1	DOOR ASSY, RACK		52	67	X-4032-762-1	FRAME ASSY, SCREEN
52	4-048-634-01	SHAFT		53	68	* 4-040-122-01	HOLDER (S), SCREEN
53	4-036-901-01	SCREW		54	69	* 4-040-120-01	HOLDER (L), SCREEN
54	4-048-791-01	GLASS (61), DOOR		55	70	4-040-124-11	PLATE (L), DIFFUSION
55	4-038-385-01	SPACER		56	71	4-040-123-11	PLATE (F), DIFFUSION
56	4-038-384-01	CATCHER, MAGNET		57	72	* 4-049-096-01	HOLDER (RIGHT), SIDE
57	4-041-164-11	SCREW (4X20), TAPPING		58	73	* 4-049-098-01	CUSHION
58	X-4032-612-1	PANEL ASSY, CONTROL		59	74	* 4-049-097-01	HOLDER (LEFT), SIDE
59	4-048-000-01	DOOR, CONTROL		60	75	* 4-037-351-01	HOLDER, MIRROR
60	4-047-999-01	FILTER, REMOTE		61	76	4-050-128-01	MIRROR (61)
61	4-047-998-01	GUIDE, LIGHT, LED		62	77	X-4033-048-1	COVER ASSY, MIRROR
62	4-048-001-01	BUTTON, MULTI		63	78	4-048-150-01	CAP, HOLE
63	* A-1372-099-A	HA BOARD, COMPLETE		64	79	4-039-009-02	CUSHION, GLASS
64	4-048-335-01	GRILLE, SPEAKER		65	80	1-505-377-11	SPEAKER (13CM)
65	1-504-785-11	SPEAKER (10CM)		66	81	* 4-054-051-01	COVER, SPEAKER
66	* 4-049-034-01	BOARD, REAR					

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 5-3. CHASSIS

- : 7-685-648-79 +BVTP 3X12
- : 7-685-663-71 +BVTP 4X16
- $\Delta$  : 7-685-661-14 +BVTP 4X12



REF. NO.	PART NO.	DESCRIPTION	REMARK
101	$\Delta$ 1-223-925-11	RESISTOR ASSY (HIGH-VOLTAGE)	
102	* A-1316-257-A	G BOARD, COMPLETE	
103	$\Delta$ 1-769-837-11	CORD, POWER(WITH NOISE FILTER)	(7.0A/125V)
104	* 3-659-682-11	HOLDER, PC BOARD	
105	* 4-382-848-01	HOLDER, PCB	
106	* 3-703-141-00	HOLDER, PCB	
107	* A-1341-885-A	E BOARD, COMPLETE	
108	$\Delta$ 1-453-189-11	TRANSFORMER ASSY, FLYBACK	(NX-2631//A4S)
109	$\Delta$ 1-900-211-34	LEAD ASSY, HV	
110	* 3-687-542-41	SPACER, PC BOARD SPACE	
111	4-041-164-11	SCREW (4X20), TAPPING	
112	$\Delta$ 8-598-955-10	BLOCK ASSY, HIGH-VOLTAGE	
113	4-373-137-01	CAP (Z), RUBBER	
114	* A-1297-794-A	A BOARD, COMPLETE (KP-46V35/53V35)	
	* A-1297-795-A	A BOARD, COMPLETE (KP-61V35)	
115	$\Delta$ 8-598-254-00	TUNER, BTF-WA402	
116	* A-1306-527-A	M BOARD, COMPLETE	
117	* A-1373-559-A	U BOARD, COMPLETE	

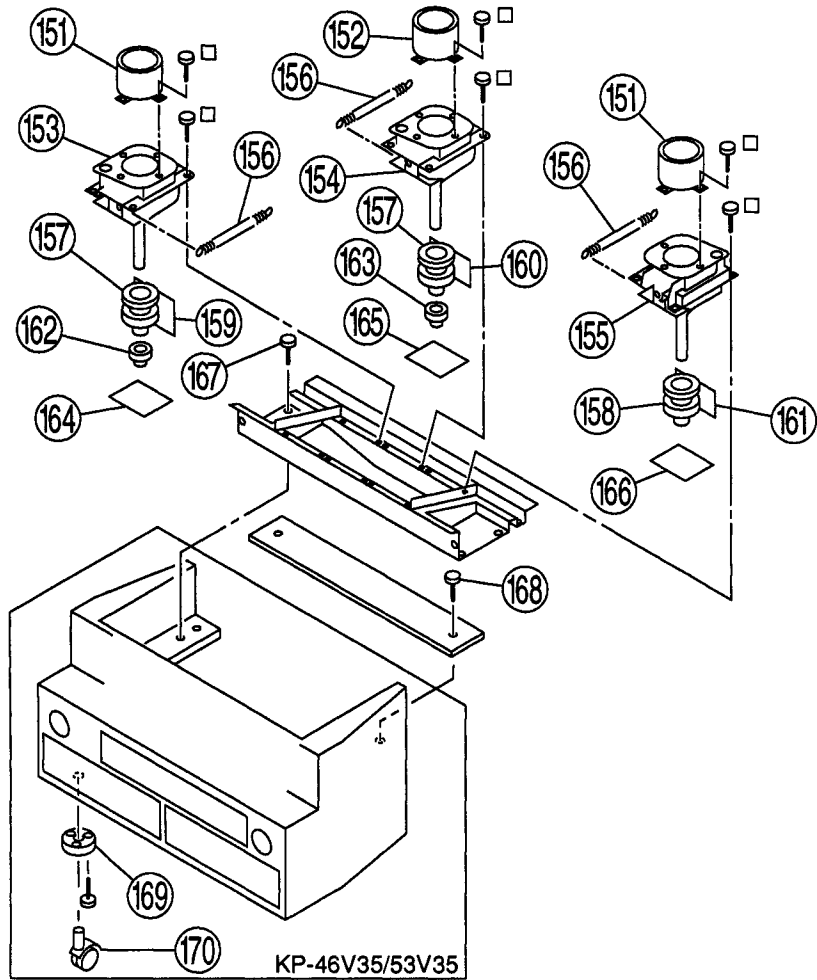
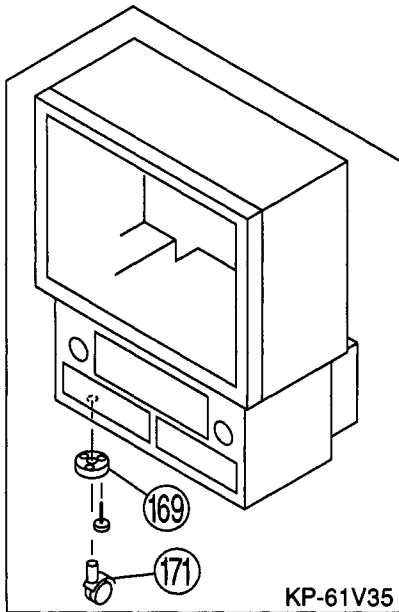
REF. NO.	PART NO.	DESCRIPTION	REMARK
118	* A-1195-062-A	P BOARD, COMPLETE	
119	4-047-951-41	TERMINAL BOARD (A)	
120	4-041-165-01	SCREW (3X12), TAPPING, +BV	
121	4-047-952-11	TERMINAL BOARD (B)	
122	1-417-178-11	SELECTOR, ANTENNA (AS-2)	
123	1-556-945-21	CABLE, P-P	
124	* 4-047-950-01	BRACKET, D PC BOARD	
125	* A-1346-296-A	D BOARD, COMPLETE	
126	* 4-047-949-01	BRACKET, MAIN PC BOARD	
127	$\Delta$ 8-598-047-11	TUNER, BTF-LA401	
128	* 1-557-056-41	CABLE, P-P	
129	8-741-797-01	FILTER, DIGITAL COM SBX1797-01	
130	4-047-937-01	LABEL (B), TERMINAL	
131	4-054-050-01	LABEL (A), TERMINAL	
132	* A-1304-087-A	MB BOARD, COMPLETE	
133	* 4-053-180-01	BRACKET, K	
134	* A-1380-523-A	K BOARD, COMPLETE	
135	* 4-053-181-01	HOLDER, PCB	

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

#### 5-4. PICTURE TUBE

□ : 7-685-663-71 +BVTP 4X16



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
151	4-034-057-01	LENS (LINNIT) (KP-46V35/53V35)		160	* A-1390-489-A	ZG BOARD, COMPLETE	
	4-040-131-01	LENS (LINNIT POINT 6) (KP-61V35)		161	* A-1390-491-A	ZB BOARD, COMPLETE	
152	4-034-057-11	LENS (LINNIT) (KP-46V35/53V35)		162	$\Delta$ 1-452-790-21	NECK ASSY	
	4-040-131-11	LENS (LINNIT POINT 6) (KP-61V35)		163	$\Delta$ 1-452-790-11	NECK ASSY	
153	$\Delta$ 8-736-077-15	PICTURE TUBE 07MAC2(R) (KP-46V35)		164	* A-1331-498-A	CR BOARD, COMPLETE	
	$\Delta$ 8-736-077-25	PICTURE TUBE 07MAC3(R) (KP-53V35/61V35)		165	* A-1331-499-A	CG BOARD, COMPLETE	
154	$\Delta$ 8-736-075-05	PICTURE TUBE 07MAC2(G)		166	* A-1331-500-A	CB BOARD, COMPLETE	
155	$\Delta$ 8-736-076-15	PICTURE TUBE 07MAC2(B) (KP-46V35)		167	4-052-894-01	SCREW (4X20), HEAD TAPPING	
	$\Delta$ 8-736-076-25	PICTURE TUBE 07MAC3(B) (KP-53V35/61V35)		168	4-378-522-11	SCREW, TAPPING, HEXAGON HEAD	
156	4-048-142-01	SPRING, TENSION		169	4-030-850-01	SOCKET, CASTER	
157	$\Delta$ 8-451-463-11	DEFLECTION YOKE Y829PA2N (R), (G)		170	4-049-006-01	CASTER (KP-46V35/53V35)	
158	$\Delta$ 8-451-463-21	DEFLECTION YOKE Y829PA2N2 (B)		171	4-040-508-01	CASTER (KP-61V35)	
159	* A-1390-487-A	ZR BOARD, COMPLETE					



## SECTION 6 ELECTRICAL PARTS LIST

P

### NOTE:

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

• The components identified by  $\Delta$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

• Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

### RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

• CAPACITORS  
PF :  $\mu\text{F}$

• There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
* A-1195-062-A P BOARD, COMPLETE *****				C3252	1-163-103-00	CERAMIC CHIP 27PF	5% 50V
<CAPACITOR>				C3253	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3201	1-126-967-11	ELECT 47MF	20% 16V	C3254	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3203	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C3255	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3204	1-126-964-11	ELECT 10MF	20% 50V	C3256	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C3205	1-126-964-11	ELECT 10MF	20% 50V	C3257	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C3206	1-126-964-11	ELECT 10MF	20% 50V	C3258	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C3207	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C3259	1-163-111-00	CERAMIC CHIP 56PF	5% 50V
C3208	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C3260	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
C3209	1-126-962-11	ELECT 3.3MF	20% 50V	C3261	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3210	1-126-967-11	ELECT 47MF	20% 16V	C3263	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3212	1-126-962-11	ELECT 3.3MF	20% 50V	C3264	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C3213	1-164-346-11	CERAMIC CHIP 1MF	16V	C3265	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3214	1-164-346-11	CERAMIC CHIP 1MF	16V	C3266	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3215	1-164-346-11	CERAMIC CHIP 1MF	16V	C3267	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3216	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C3268	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3217	1-164-346-11	CERAMIC CHIP 1MF	16V	C3269	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3218	1-164-346-11	CERAMIC CHIP 1MF	16V	C3270	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C3219	1-126-935-11	ELECT 470MF	20% 16V	C3271	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C3220	1-164-346-11	CERAMIC CHIP 1MF	16V	C3272	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C3221	1-164-346-11	CERAMIC CHIP 1MF	16V	C3273	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
C3222	1-164-336-11	CERAMIC CHIP 0.33MF	25V	C3274	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3223	1-164-336-11	CERAMIC CHIP 0.33MF	25V	C3275	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3224	1-164-222-11	CERAMIC CHIP 0.22MF	25V	C3276	1-163-111-00	CERAMIC CHIP 56PF	5% 50V
C3225	1-164-222-11	CERAMIC CHIP 0.22MF	25V	C3277	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3226	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C3278	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3227	1-164-346-11	CERAMIC CHIP 1MF	16V	C3279	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3228	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C3280	1-126-964-11	ELECT 10MF	20% 50V
C3229	1-163-093-00	CERAMIC CHIP 10PF	5% 50V	C3282	1-164-346-11	CERAMIC CHIP 1MF	16V
C3230	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	<CONNECTOR>			
C3231	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	CN150	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P	
C3232	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	<DIODE>			
C3233	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D3202	8-719-031-68	DIODE HVU359TRF	
C3234	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D3203	8-719-404-46	DIODE MA110	
C3235	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D3208	8-719-110-17	DIODE RD10ESB2	
C3236	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D3209	8-719-110-17	DIODE RD10ESB2	
C3237	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	<IC>			
C3238	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	IC3200	8-759-288-13	IC MSM51C262-ZS	
C3239	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	IC3201	8-759-093-29	IC MB86144BPF-G-BND	
C3240	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	IC3202	8-759-093-28	IC MB40176PF-G-BND-EF	
C3241	1-163-103-00	CERAMIC CHIP 27PF	5% 50V	IC3203	8-759-093-28	IC MB40176PF-G-BND-EF	
C3242	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	IC3204	8-759-093-25	IC MB3512PFQ	
C3243	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	IC3205	8-759-243-19	IC TC7SU04F	
C3244	1-163-113-00	CERAMIC CHIP 68PF	5% 50V	<COIL>			
C3245	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L3201	1-410-470-11	INDUCTOR 10UH	
C3246	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L3202	1-408-424-00	INDUCTOR 180UH	
C3247	1-163-033-91	CERAMIC CHIP 0.022MF	50V				
C3248	1-163-125-00	CERAMIC CHIP 220PF	5% 50V				
C3249	1-163-117-00	CERAMIC CHIP 100PF	5% 50V				
C3250	1-163-113-00	CERAMIC CHIP 68PF	5% 50V				
C3251	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				

## SECTION 6

# ELECTRICAL PARTS LIST

P

### NOTE:

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

• The components identified by  $\boxtimes$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

• Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

### RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

### CAPACITORS

PF :  $\mu\mu\text{F}$

• There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
* A-1195-062-A P BOARD, COMPLETE *****				C3252	1-163-103-00	CERAMIC CHIP 27PF	5% 50V
<CAPACITOR>				C3253	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3201	1-126-967-11	ELECT 47MF	20% 16V	C3254	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3203	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C3255	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3204	1-126-964-11	ELECT 10MF	20% 50V	C3256	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C3205	1-126-964-11	ELECT 10MF	20% 50V	C3257	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C3206	1-126-964-11	ELECT 10MF	20% 50V	C3258	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C3207	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C3259	1-163-111-00	CERAMIC CHIP 56PF	5% 50V
C3208	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C3260	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
C3209	1-126-962-11	ELECT 3.3MF	20% 50V	C3261	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3210	1-126-967-11	ELECT 47MF	20% 16V	C3263	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3212	1-126-962-11	ELECT 3.3MF	20% 50V	C3264	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C3213	1-164-346-11	CERAMIC CHIP 1MF	16V	C3265	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3214	1-164-346-11	CERAMIC CHIP 1MF	16V	C3266	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3215	1-164-346-11	CERAMIC CHIP 1MF	16V	C3267	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3216	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C3268	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3217	1-164-346-11	CERAMIC CHIP 1MF	16V	C3269	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3218	1-164-346-11	CERAMIC CHIP 1MF	16V	C3270	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C3219	1-126-935-11	ELECT 470MF	20% 16V	C3271	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C3220	1-164-346-11	CERAMIC CHIP 1MF	16V	C3272	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C3221	1-164-346-11	CERAMIC CHIP 1MF	16V	C3273	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
C3222	1-164-336-11	CERAMIC CHIP 0.33MF	25V	C3274	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3223	1-164-336-11	CERAMIC CHIP 0.33MF	25V	C3275	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3224	1-164-222-11	CERAMIC CHIP 0.22MF	25V	C3276	1-163-111-00	CERAMIC CHIP 56PF	5% 50V
C3225	1-164-222-11	CERAMIC CHIP 0.22MF	25V	C3277	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3226	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C3278	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C3227	1-164-346-11	CERAMIC CHIP 1MF	16V	C3279	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3228	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C3280	1-126-964-11	ELECT 10MF	20% 50V
C3229	1-163-093-00	CERAMIC CHIP 10PF	5% 50V	C3282	1-164-346-11	CERAMIC CHIP 1MF	16V
C3230	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	<CONNECTOR>			
C3231	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	CN150	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P	
C3232	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	<DIODE>			
C3233	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D3202	8-719-031-68	DIODE HVU359TRF	
C3234	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D3203	8-719-404-46	DIODE MA110	
C3235	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D3208	8-719-110-17	DIODE RD10ESB2	
C3236	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D3209	8-719-110-17	DIODE RD10ESB2	
C3237	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	<IC>			
C3238	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	IC3200	8-759-288-13	IC MSM51C262-ZS	
C3239	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	IC3201	8-759-093-29	IC MB86144BPF-G-BND	
C3240	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	IC3202	8-759-093-28	IC MB40176PF-G-BND-EF	
C3241	1-163-103-00	CERAMIC CHIP 27PF	5% 50V	IC3203	8-759-093-28	IC MB40176PF-G-BND-EF	
C3242	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	IC3204	8-759-093-25	IC MB3512PFQ	
C3243	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	IC3205	8-759-243-19	IC TC7SU04F	
C3244	1-163-113-00	CERAMIC CHIP 68PF	5% 50V	<COIL>			
C3245	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L3201	1-410-470-11	INDUCTOR 10UH	
C3246	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L3202	1-408-424-00	INDUCTOR 180UH	
C3247	1-163-033-91	CERAMIC CHIP 0.022MF	50V				
C3248	1-163-125-00	CERAMIC CHIP 220PF	5% 50V				
C3249	1-163-117-00	CERAMIC CHIP 100PF	5% 50V				
C3250	1-163-113-00	CERAMIC CHIP 68PF	5% 50V				
C3251	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				

A

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C243	1-137-399-11	FILM	0.1MF 5% 50V	CN222	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P	
C244	1-104-665-11	ELECT	100MF 20% 25V	CN223	*1-564-507-11	PLUG, CONNECTOR 4P	
C245	1-137-399-11	FILM	0.1MF 5% 50V	CN224	*1-564-507-11	PLUG, CONNECTOR 4P	
C249	1-137-399-11	FILM	0.1MF 5% 50V	CN225	*1-564-513-11	PLUG, CONNECTOR 10P	
C262	1-104-664-11	ELECT	47MF 20% 25V	CN511	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
C263	1-104-665-11	ELECT	100MF 20% 25V	CN527	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
C264	1-104-665-11	ELECT	100MF 20% 25V	CN528	1-695-915-11	TAB (CONTACT)	
C265	1-104-665-11	ELECT	100MF 20% 25V	CN541	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
C266	1-104-665-11	ELECT	100MF 20% 25V	CN571	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
C267	1-104-664-11	ELECT	47MF 20% 25V	CN1026	*1-564-506-11	PLUG, CONNECTOR 3P	
C270	1-102-978-00	CERAMIC	220PF 5% 50V				
C271	1-102-123-00	CERAMIC	0.0033MF 10% 50V				
C272	1-102-074-00	CERAMIC	0.001MF 10% 50V				
C273	1-126-962-11	ELECT	3.3MF 20% 50V				
C274	1-126-964-11	ELECT	10MF 20% 50V				
C275	1-124-902-00	ELECT	0.47MF 20% 50V				
C276	1-102-125-00	CERAMIC	0.0047MF 10% 50V				
C277	1-126-963-11	ELECT	4.7MF 20% 50V				
C278	1-124-925-11	ELECT	2.2MF 20% 50V				
C279	1-126-963-11	ELECT	4.7MF 20% 50V				
C280	1-126-963-11	ELECT	4.7MF 20% 50V				
C281	1-102-123-00	CERAMIC	0.0033MF 10% 50V				
C282	1-102-125-00	CERAMIC	0.0047MF 10% 50V				
C283	1-126-963-11	ELECT	4.7MF 20% 50V				
C284	1-124-925-11	ELECT	2.2MF 20% 50V				
C285	1-126-963-11	ELECT	4.7MF 20% 50V				
C286	1-126-963-11	ELECT	4.7MF 20% 50V				
C287	1-102-074-00	CERAMIC	0.001MF 10% 50V				
C288	1-104-665-11	ELECT	100MF 20% 25V				
C289	1-124-903-11	ELECT	1MF 20% 50V				
C290	1-102-978-00	CERAMIC	220PF 5% 50V				
C291	1-124-902-00	ELECT	0.47MF 20% 50V				
C292	1-104-664-11	ELECT	47MF 20% 25V				
C501	1-124-902-00	ELECT	0.47MF 20% 50V				
C502	1-104-664-11	ELECT	47MF 20% 25V				
C503	1-137-370-11	FILM	0.01MF 5% 50V				
C504	1-102-973-00	CERAMIC	100PF 5% 50V				
C505	1-137-372-11	FILM	0.022MF 5% 50V				
C506	1-123-024-21	ELECT	33MF 160V				
C507	1-107-368-11	FILM	0.047MF 10% 200V				
C508	1-107-638-11	ELECT	33MF 20% 160V				
C509	1-107-368-11	FILM	0.047MF 10% 200V				
C510	1-102-030-00	CERAMIC	330PF 10% 500V				
C511	1-137-414-11	FILM	0.0047MF 10% 100V				
C512	1-162-115-00	CERAMIC	330PF 10% 2KV				
C513	1-136-598-11	FILM	3MF 5% 200V				
C514	1-136-613-11	FILM	0.0068MF 3% 2KV				
C515	1-162-114-00	CERAMIC	0.0047MF 2KV				
C516	1-107-719-11	ELECT	220MF 20% 50V				
C517	1-126-971-11	ELECT	470MF 20% 50V				
C518	1-126-971-11	ELECT	470MF 20% 50V				
C519	1-124-903-11	ELECT	1MF 20% 50V				
C1001	1-126-963-11	ELECT	4.7MF 20% 50V				
C1002	1-126-964-11	ELECT	10MF 20% 50V				
C1003	1-126-965-11	ELECT	22MF 20% 50V				
C1004	1-126-952-11	ELECT	1000MF 20% 16V				
C1005	1-104-665-11	ELECT	100MF 20% 25V				
C1006	1-101-004-00	CERAMIC	0.01MF 50V				
C1007	1-126-935-11	ELECT	470MF 20% 16V				
C1008	1-101-004-00	CERAMIC	0.01MF 50V				
C1009	1-126-964-11	ELECT	10MF 20% 50V				
C1010	1-126-964-11	ELECT	10MF 20% 50V				
C1011	1-102-121-00	CERAMIC	0.0022MF 10% 50V				
C1012	1-102-121-00	CERAMIC	0.0022MF 10% 50V				
<CONNECTOR>				<DIODE>			
CN221	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P		D201	8-719-110-17	DIODE RD10ESB2	
				D202	8-719-110-17	DIODE RD10ESB2	
				D220	8-719-991-33	DIODE 1SS133T-77	
				D221	8-719-991-33	DIODE 1SS133T-77	
				D230	8-719-991-33	DIODE 1SS133T-77	
				D231	8-719-991-33	DIODE 1SS133T-77	
				D232	8-719-991-33	DIODE 1SS133T-77	
				D233	8-719-991-33	DIODE 1SS133T-77	
				D234	8-719-991-33	DIODE 1SS133T-77	
				D235	8-719-991-33	DIODE 1SS133T-77	
				D262	8-719-991-33	DIODE 1SS133T-77	
				D263	8-719-991-33	DIODE 1SS133T-77	
				D264	8-719-991-33	DIODE 1SS133T-77	
				D301	8-719-924-11	DIODE MTZJ-T-77-22	
				D302	8-719-924-11	DIODE MTZJ-T-77-22	
				D303	8-719-924-11	DIODE MTZJ-T-77-22	
				D304	8-719-924-11	DIODE MTZJ-T-77-22	
				D501	8-719-991-33	DIODE 1SS133T-77	
				D502	8-719-983-14	DIODE MTZJ-T-77-3.9	
				D504	8-719-991-33	DIODE 1SS133T-77	
				D505	8-719-991-33	DIODE 1SS133T-77	
				D506	8-719-300-80	DIODE RU-1C	
				D507	8-719-018-82	DIODE RGP02-20EL-6394	
				D509	8-719-900-95	DIODE V09G (KP-46V35/53V35)	
				D510	8-719-900-95	DIODE V09G (KP-46V35/53V35)	
				D511	8-719-991-33	DIODE 1SS133T-77	
				D1001	8-719-982-24	DIODE MTZJ-33A	
				D1002	8-719-982-24	DIODE MTZJ-33A	
				<IC>			
				IC201	8-759-135-80	IC uPC358C	
				IC202	8-759-090-21	IC TDA8424	
				IC230	8-759-190-89	IC TDA7265	
				IC262	8-759-054-12	IC PQ09RA1	
				IC263	8-759-504-46	IC PQ05RF1	
				IC264	8-759-279-76	IC MCT7812CT	
				IC270	8-759-253-06	IC XR1071CP	
				IC271	8-752-057-18	IC CXA1315P	
				IC1001	8-759-300-71	IC HD14053BFP	
				<COIL>			
				L501	1-411-189-11	COIL, CHOKE 15mH	
				L503	1-406-832-11	COIL, HORIZONTAL LINEARITY (HLC)	
				L1001	1-408-408-00	INDUCTOR 8.2UH	
				L1002	1-408-408-00	INDUCTOR 8.2UH	
				L1003	1-408-421-00	INDUCTOR 100UH	
				L1004	1-408-408-00	INDUCTOR 8.2UH	
				L1006	1-408-408-00	INDUCTOR 8.2UH	
				L1007	1-408-408-00	INDUCTOR 8.2UH	
				<TRANSISTOR>			
				Q220	8-729-927-14	TRANSISTOR DTC323TS	
				Q221	8-729-119-76	TRANSISTOR 2SA1175-HFE	



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q222	8-729-927-14	TRANSISTOR DTC323TS		R252	1-249-417-11	CARBON 1K	5% 1/4W
Q223	8-729-119-76	TRANSISTOR 2SA1175-HFE		R253	1-249-417-11	CARBON 1K	5% 1/4W
Q230	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q231	8-729-119-78	TRANSISTOR 2SC2785-HFE		R254	1-249-417-11	CARBON 1K	5% 1/4W
Q232	8-729-119-78	TRANSISTOR 2SC2785-HFE		R255	1-249-429-11	CARBON 10K	5% 1/4W
Q233	8-729-119-78	TRANSISTOR 2SC2785-HFE		R256	1-249-436-11	CARBON 39K	5% 1/4W
Q234	8-729-119-78	TRANSISTOR 2SC2785-HFE		R257	1-249-429-11	CARBON 10K	5% 1/4W
Q235	8-729-119-76	TRANSISTOR 2SA1175-HFE		R258	1-249-429-11	CARBON 10K	5% 1/4W
Q236	8-729-119-78	TRANSISTOR 2SC2785-HFE		R259	1-216-357-00	METAL OXIDE 4.7	5% 1W F
Q237	8-729-119-78	TRANSISTOR 2SC2785-HFE		R260	1-216-357-00	METAL OXIDE 4.7	5% 1W F
Q238	8-729-119-78	TRANSISTOR 2SC2785-HFE		R270	1-215-440-00	METAL 6.2K	1% 1/4W
Q270	8-729-119-76	TRANSISTOR 2SA1175-HFE		R271	1-249-429-11	CARBON 10K	5% 1/4W
Q271	8-729-119-78	TRANSISTOR 2SC2785-HFE		R272	1-247-883-00	CARBON 150K	5% 1/4W
Q501	8-729-119-76	TRANSISTOR 2SA1175-HFE		R273	1-249-429-11	CARBON 10K	5% 1/4W
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE		R274	1-249-441-11	CARBON 100K	5% 1/4W
Q503	8-729-119-78	TRANSISTOR 2SC2785-HFE		R276	1-249-425-11	CARBON 4.7K	5% 1/4W
Q504	8-729-119-78	TRANSISTOR 2SC2785-HFE		R277	1-249-429-11	CARBON 10K	5% 1/4W
Q505	8-729-119-80	TRANSISTOR 2SC2688-LK		R279	1-249-441-11	CARBON 100K	5% 1/4W
Q506	8-729-201-32	TRANSISTOR 2SA1013-O		R280	1-249-417-11	CARBON 1K	5% 1/4W
Q507	8-729-304-92	TRANSISTOR 2SB649A-C		R281	1-249-429-11	CARBON 10K	5% 1/4W
Q508	8-729-201-32	TRANSISTOR 2SA1013-O		R282	1-215-440-00	METAL 6.2K	1% 1/4W
Q509	8-729-010-98	TRANSISTOR 2SA1492M-OPY		R283	1-249-429-11	CARBON 10K	5% 1/4W
Q510	8-729-021-48	TRANSISTOR 2SD2348LBSONY		R501	1-249-421-11	CARBON 2.2K	5% 1/4W
Q511	8-729-119-76	TRANSISTOR 2SA1175-HFE		R502	1-249-429-11	CARBON 10K	5% 1/4W
Q1001	8-729-119-76	TRANSISTOR 2SA1175-HFE		R503	1-249-441-11	CARBON 100K	5% 1/4W
Q1002	8-729-119-76	TRANSISTOR 2SA1175-HFE		R504	1-249-429-11	CARBON 10K	5% 1/4W
Q1003	8-729-119-76	TRANSISTOR 2SA1175-HFE		R505	1-215-437-00	METAL 4.7K	1% 1/4W
Q1004	8-729-119-78	TRANSISTOR 2SC2785-HFE		R506	1-215-433-00	METAL 3.3K	1% 1/4W
<b>&lt;RESISTOR&gt;</b>				R507	1-249-407-11	CARBON 150	5% 1/4W
R207	1-249-431-11	CARBON 15K	5% 1/4W	R508	1-249-421-11	CARBON 2.2K	5% 1/4W
R208	1-249-429-11	CARBON 10K	5% 1/4W	R509	1-249-423-11	CARBON 3.3K	5% 1/4W
R209	1-249-431-11	CARBON 15K	5% 1/4W	R510	1-249-417-11	CARBON 1K	5% 1/4W
R210	1-247-815-91	CARBON 220	5% 1/4W	R511	1-247-895-91	CARBON 470K	5% 1/4W
R211	1-249-429-11	CARBON 10K	5% 1/4W				
R212	1-249-441-11	CARBON 100K	5% 1/4W	R512	1-215-925-11	METAL OXIDE 22K	5% 3W F
R213	1-249-441-11	CARBON 100K	5% 1/4W	R513	1-215-900-11	METAL OXIDE 22K	5% 2W F
R214	1-247-815-91	CARBON 220	5% 1/4W	R514	1-249-421-11	CARBON 2.2K	5% 1/4W F
R215	1-249-441-11	CARBON 100K	5% 1/4W	R515	1-215-925-11	METAL OXIDE 22K	5% 3W F
R216	1-249-441-11	CARBON 100K	5% 1/4W	R516	1-249-430-11	CARBON 12K	5% 1/4W F
R217	1-247-807-31	CARBON 100	5% 1/4W	R517	1-249-429-11	CARBON 10K	5% 1/4W
R218	1-247-807-31	CARBON 100	5% 1/4W	R518	1-249-427-11	CARBON 6.8K	5% 1/4W F
R219	1-249-417-11	CARBON 1K	5% 1/4W	R519	1-249-417-11	CARBON 1K	5% 1/4W
R220	1-249-429-11	CARBON 10K	5% 1/4W	R520	1-249-423-11	CARBON 3.3K	5% 1/4W F
R221	1-249-437-11	CARBON 47K	5% 1/4W	R521	1-249-437-11	CARBON 47K	5% 1/4W
R222	1-249-417-11	CARBON 1K	5% 1/4W	R522	1-249-417-11	CARBON 1K	5% 1/4W F
R223	1-249-429-11	CARBON 10K	5% 1/4W	R523	1-249-426-11	CARBON 5.6K	5% 1/4W F
R224	1-249-429-11	CARBON 10K	5% 1/4W	R524	1-215-925-11	METAL OXIDE 22K	5% 3W F
R230	1-249-427-11	CARBON 6.8K	5% 1/4W	R525	1-216-373-11	METAL OXIDE 2.2	5% 2W F
R231	1-249-429-11	CARBON 10K	5% 1/4W	R526	1-216-478-11	METAL OXIDE 390	5% 3W F
R233	1-249-429-11	CARBON 10K	5% 1/4W	R528	1-216-477-11	METAL OXIDE 270	5% 3W F
R234	1-249-441-11	CARBON 100K	5% 1/4W	R529	1-216-477-11	METAL OXIDE 270	5% 3W F
R235	1-249-414-11	CARBON 560	5% 1/4W	R530	1-216-477-11	METAL OXIDE 270	5% 3W F
R236	1-249-432-11	CARBON 18K	5% 1/4W	R531	1-216-477-11	METAL OXIDE 270	5% 3W F
R237	1-249-414-11	CARBON 560	5% 1/4W	R532	1-215-442-00	METAL 7.5K	1% 1/4W
R238	1-249-431-11	CARBON 15K	5% 1/4W	R533	1-215-443-00	METAL 8.2K	1% 1/4W
R239	1-249-427-11	CARBON 6.8K	5% 1/4W	R534	1-215-437-00	METAL 4.7K	1% 1/4W
R241	1-249-439-11	CARBON 68K	5% 1/4W	R1001	1-215-900-11	METAL OXIDE 22K	5% 2W F
R242	1-249-432-11	CARBON 18K	5% 1/4W	R1002	1-215-900-11	METAL OXIDE 22K	5% 2W F
R243	1-247-863-91	CARBON 22K	5% 1/4W	R1003	1-249-411-11	CARBON 330	5% 1/4W
R244	1-247-863-91	CARBON 22K	5% 1/4W	R1004	1-249-434-11	CARBON 27K	5% 1/4W
R245	1-249-437-11	CARBON 47K	5% 1/4W	R1005	1-249-436-11	CARBON 39K	5% 1/4W
R246	1-247-863-91	CARBON 22K	5% 1/4W	R1006	1-249-434-11	CARBON 27K	5% 1/4W
R247	1-249-430-11	CARBON 12K	5% 1/4W	R1007	1-249-425-11	CARBON 4.7K	5% 1/4W
R248	1-249-437-11	CARBON 47K	5% 1/4W	R1009	1-247-807-31	CARBON 100	5% 1/4W
R249	1-247-807-31	CARBON 100	5% 1/4W	R1010	1-249-411-11	CARBON 330	5% 1/4W
R250	1-249-417-11	CARBON 1K	5% 1/4W	R1011	1-249-425-11	CARBON 4.7K	5% 1/4W
R251	1-249-437-11	CARBON 47K	5% 1/4W	R1012	1-249-425-11	CARBON 4.7K	5% 1/4W

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**A** **MB** **M**

REF. NO.	PART NO.	DESCRIPTION	REMARK
R1013	1-247-807-31	CARBON 100 5%	1/4W
R1014	1-249-436-11	CARBON 39K 5%	1/4W
R1016	1-247-807-31	CARBON 100 5%	1/4W
R1017	1-249-417-11	CARBON 1K 5%	1/4W
R1018	1-215-432-00	METAL 3K 1%	1/4W
R1019	1-249-441-11	CARBON 100K 5%	1/4W

<RELAY>

RY230	1-755-028-11	RELAY
RY231	1-755-028-11	RELAY

<TRANSFORMER>

T501	$\Delta$ 1-437-078-11	TRANSFORMER, HORIZONTAL DRIVE
------	-----------------------	-------------------------------

<TUNER>

TU1001	$\Delta$ 8-598-047-11	TUNER BTF-LA401
TU1002	$\Delta$ 8-598-254-00	TUNER BTF-WA402

\*\*\*\*\*

\* A-1304-087-A MB BOARD, COMPLETE  
\*\*\*\*\*

<CAPACITOR>

C2901	1-102-116-00	CERAMIC 680PF 10%	50V
C2902	1-102-116-00	CERAMIC 680PF 10%	50V
C2903	1-101-004-00	CERAMIC 0.01MF	50V
C2904	1-126-964-11	ELECT 10MF 20%	50V
C2905	1-126-964-11	ELECT 10MF 20%	50V
C2906	1-101-004-00	CERAMIC 0.01MF	50V
C2907	1-101-004-00	CERAMIC 0.01MF	50V
C2908	1-126-964-11	ELECT 10MF 20%	50V

<CONNECTOR>

CN2957	* 1-564-515-11	PLUG, CONNECTOR 12P
--------	----------------	---------------------

<IC>

IC2901	8-759-388-26	IC NJM2129D
IC2902	8-759-984-03	IC LM339N
IC2903	8-752-057-18	IC CXA1315P

<TRANSISTOR>

Q2901	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q2902	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q2903	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q2904	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q2905	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q2906	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q2907	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q2908	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q2909	8-729-119-78	TRANSISTOR 2SC2785-HFE

<RESISTOR>

R2901	1-249-429-11	CARBON 10K 5%	1/4W
R2902	1-249-429-11	CARBON 10K 5%	1/4W
R2903	1-249-417-11	CARBON 1K 5%	1/4W
R2904	1-249-429-11	CARBON 10K 5%	1/4W
R2905	1-249-429-11	CARBON 10K 5%	1/4W
R2906	1-249-414-11	CARBON 560 5%	1/4W

REF. NO.	PART NO.	DESCRIPTION	REMARK
R2907	1-249-417-11	CARBON 1K 5%	1/4W
R2908	1-249-414-11	CARBON 560 5%	1/4W
R2909	1-249-413-11	CARBON 470 5%	1/4W
R2910	1-249-429-11	CARBON 10K 5%	1/4W

R2911	1-249-437-11	CARBON 47K 5%	1/4W
R2912	1-249-425-11	CARBON 4.7K 5%	1/4W
R2913	1-249-429-11	CARBON 10K 5%	1/4W
R2914	1-249-437-11	CARBON 47K 5%	1/4W
R2915	1-249-429-11	CARBON 10K 5%	1/4W

R2916	1-249-437-11	CARBON 47K 5%	1/4W
R2917	1-249-429-11	CARBON 10K 5%	1/4W
R2918	1-247-863-91	CARBON 22K 5%	1/4W
R2919	1-247-863-91	CARBON 22K 5%	1/4W
R2920	1-249-425-11	CARBON 4.7K 5%	1/4W

R2921	1-249-425-11	CARBON 4.7K 5%	1/4W
R2922	1-247-815-91	CARBON 220 5%	1/4W
R2923	1-249-425-11	CARBON 4.7K 5%	1/4W
R2925	1-247-815-91	CARBON 220 5%	1/4W
R2926	1-247-815-91	CARBON 220 5%	1/4W

R2927	1-249-429-11	CARBON 10K 5%	1/4W
R2928	1-249-429-11	CARBON 10K 5%	1/4W
R2929	1-249-429-11	CARBON 10K 5%	1/4W
R2930	1-249-425-11	CARBON 4.7K 5%	1/4W
R2931	1-249-429-11	CARBON 10K 5%	1/4W

R2932	1-249-429-11	CARBON 10K 5%	1/4W
R2933	1-249-429-11	CARBON 10K 5%	1/4W
R2934	1-249-429-11	CARBON 10K 5%	1/4W
R2935	1-249-429-11	CARBON 10K 5%	1/4W
R2936	1-249-423-11	CARBON 3.3K 5%	1/4W

\*\*\*\*\*

\* A-1306-527-A M BOARD, COMPLETE  
\*\*\*\*\*

<CAPACITOR>

C001	1-126-935-11	ELECT 470MF 20%	16V
C002	1-126-916-11	ELECT 1000MF 20%	6.3V
C004	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C005	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C006	1-163-001-11	CERAMIC CHIP 220PF 10%	50V

C007	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C009	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C010	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C011	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C012	1-163-001-11	CERAMIC CHIP 220PF 10%	50V

C013	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C014	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C015	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C016	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C017	1-163-001-11	CERAMIC CHIP 220PF 10%	50V

C018	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C019	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C020	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C021	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C022	1-163-001-11	CERAMIC CHIP 220PF 10%	50V

C023	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C024	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C025	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C026	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C028	1-163-001-11	CERAMIC CHIP 220PF 10%	50V

C029	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C030	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C031	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C032	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C033	1-163-809-11	CERAMIC CHIP 0.047MF 10%	25V

**M**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C034	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	C355	1-126-965-11	ELECT 22MF 20%	50V
C035	1-124-903-11	ELECT 1MF	20% 50V	C357	1-104-664-11	ELECT 47MF 20%	25V
C037	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C358	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C038	1-126-935-11	ELECT 470MF	20% 16V	C359	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C040	1-124-903-11	ELECT 1MF	20% 50V	C360	1-126-964-11	ELECT 10MF	20% 50V
C041	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	C361	1-126-964-11	ELECT 10MF	20% 50V
C042	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	C362	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C046	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	C363	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C047	1-124-903-11	ELECT 1MF	20% 50V	C364	1-126-964-11	ELECT 10MF	20% 50V
C048	1-163-245-11	CERAMIC CHIP 56PF	5% 50V	C365	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C049	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	C366	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C050	1-163-031-11	CERAMIC CHIP 0.01MF	50V	C368	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V
C051	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C369	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C054	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	C370	1-104-665-11	ELECT 100MF	20% 25V
C055	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C371	1-104-665-11	ELECT 100MF	20% 25V
C056	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	<CHIP CONDUCTOR>			
C057	1-163-229-11	CERAMIC CHIP 12PF	5% 50V	CJ001	1-216-295-91	CONDUCTOR, CHIP	
C058	1-163-102-00	CERAMIC CHIP 24PF	5% 50V	CJ002	1-216-295-91	CONDUCTOR, CHIP	
C060	1-124-903-11	ELECT 1MF	20% 50V	CJ003	1-216-295-91	CONDUCTOR, CHIP	
C062	1-163-038-91	CERAMIC CHIP 0.1MF	25V	<CONNECTOR>			
C063	1-126-964-11	ELECT 10MF	20% 50V	CN046	* 1-564-512-11	PLUG, CONNECTOR 9P	
C064	1-126-964-11	ELECT 10MF	20% 50V	CN052	* 1-564-507-11	PLUG, CONNECTOR 4P	
C065	1-163-038-91	CERAMIC CHIP 0.1MF	25V	CN053	* 1-564-507-11	PLUG, CONNECTOR 4P	
C066	1-163-135-00	CERAMIC CHIP 560PF	5% 50V	CN054	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P	
C067	1-137-399-11	FILM 0.1MF	5% 50V	CN070	* 1-564-512-11	PLUG, CONNECTOR 9P	
C068	1-137-367-11	FILM 0.0033MF	5% 50V	CN304	* 1-564-512-11	PLUG, CONNECTOR 9P	
C069	1-137-375-11	FILM 0.068MF	5% 50V	CN314	* 1-564-509-11	PLUG, CONNECTOR 6P	
C070	1-104-664-11	ELECT 47MF	20% 25V	CN321	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P	
C071	1-124-464-11	ELECT 0.22MF	20% 50V	CN322	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P	
C074	1-126-935-11	ELECT 470MF	20% 16V	CN351	* 1-564-509-11	PLUG, CONNECTOR 6P	
C075	1-163-031-11	CERAMIC CHIP 0.01MF	50V	CN355	* 1-565-930-11	CONNECTOR (RECEPTACLE) 30P	
C076	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	CN356	* 1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)	
C302	1-124-902-00	ELECT 0.47MF	20% 50V	CN357	* 1-564-516-11	PLUG, CONNECTOR 13P	
C303	1-124-902-00	ELECT 0.47MF	20% 50V	CN358	* 1-564-508-11	PLUG, CONNECTOR 5P	
C304	1-126-963-11	ELECT 4.7MF	20% 50V	<DIODE>			
C309	1-163-019-00	CERAMIC CHIP 0.0068MF	10% 50V	D001	8-719-404-46	DIODE MA110	
C310	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	D002	8-719-404-46	DIODE MA110	
C311	1-124-925-11	ELECT 2.2MF	20% 50V	D003	8-719-404-46	DIODE MA110	
C312	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	D004	8-719-109-89	DIODE RD5.6ESB2	
C313	1-104-664-11	ELECT 47MF	20% 25V	D005	8-719-109-89	DIODE RD5.6ESB2	
C314	1-163-031-11	CERAMIC CHIP 0.01MF	50V	D006	8-719-109-89	DIODE RD5.6ESB2	
C315	1-126-934-11	ELECT 220MF	20% 16V	D007	8-719-109-89	DIODE RD5.6ESB2	
C316	1-131-374-00	TANTALUM 33MF	10% 16V	D008	8-719-002-81	DIODE 1T363	
C317	1-163-031-11	CERAMIC CHIP 0.01MF	50V	D009	8-719-404-46	DIODE MA110	
C318	1-124-925-11	ELECT 2.2MF	20% 50V	D010	8-719-404-46	DIODE MA110	
C319	1-124-903-11	ELECT 1MF	20% 50V	D011	8-719-404-46	DIODE MA110	
C320	1-124-903-11	ELECT 1MF	20% 50V	D012	8-719-404-46	DIODE MA110	
C321	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	D013	8-719-404-46	DIODE MA110	
C323	1-163-031-11	CERAMIC CHIP 0.01MF	50V	D014	8-719-404-46	DIODE MA110	
C324	1-126-965-11	ELECT 22MF	20% 50V	D015	8-719-404-46	DIODE MA110	
C327	1-163-139-00	CERAMIC CHIP 820PF	5% 50V	D016	8-719-404-46	DIODE MA110	
C328	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	D017	8-719-404-46	DIODE MA110	
C329	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	D018	8-719-404-46	DIODE MA110	
C338	1-126-963-11	ELECT 4.7MF	20% 50V	D019	8-719-404-46	DIODE MA110	
C339	1-124-464-11	ELECT 0.22MF	20% 50V	D020	8-719-105-91	DIODE RD5.6M-B2	
C340	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	D305	8-719-923-60	DIODE MTZJ-T-77-9.1A	
C341	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	D307	8-719-923-60	DIODE MTZJ-T-77-9.1A	
C342	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	D308	8-719-110-22	DIODE RD11ESB2	
C343	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	D309	8-719-109-84	DIODE RD5.1ESB1	
C344	1-163-031-11	CERAMIC CHIP 0.01MF	50V	D310	8-719-914-44	DIODE DAP202K	
C345	1-163-031-11	CERAMIC CHIP 0.01MF	50V	D311	8-719-914-43	DIODE DAN202K	
C346	1-163-031-11	CERAMIC CHIP 0.01MF	50V	D312	8-719-404-46	DIODE MA110	
C347	1-124-902-00	ELECT 0.47MF	20% 50V	D313	8-719-404-46	DIODE MA110	
C348	1-163-231-11	CERAMIC CHIP 15PF	5% 50V				
C349	1-163-243-11	CERAMIC CHIP 47PF	5% 50V				
C350	1-126-964-11	ELECT 10MF	20% 50V				
C352	1-163-031-11	CERAMIC CHIP 0.01MF	50V				
C353	1-104-665-11	ELECT 100MF	20% 25V				
C354	1-163-235-11	CERAMIC CHIP 22PF	5% 50V				

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q318	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q319	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q320	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q321	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q322	8-729-422-27	TRANSISTOR 2SD601A-Q	
<RESISTOR>			
R001	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R002	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R003	1-216-033-00	METAL GLAZE 220	5% 1/10W
R004	1-216-033-00	METAL GLAZE 220	5% 1/10W
R005	1-216-033-00	METAL GLAZE 220	5% 1/10W
R006	1-216-033-00	METAL GLAZE 220	5% 1/10W
R007	1-216-033-00	METAL GLAZE 220	5% 1/10W
R008	1-216-033-00	METAL GLAZE 220	5% 1/10W
R009	1-216-033-00	METAL GLAZE 220	5% 1/10W
R010	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R011	1-216-033-00	METAL GLAZE 220	5% 1/10W
R012	1-216-033-00	METAL GLAZE 220	5% 1/10W
R013	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R014	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R015	1-216-033-00	METAL GLAZE 220	5% 1/10W
R016	1-216-033-00	METAL GLAZE 220	5% 1/10W
R017	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R018	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R019	1-216-033-00	METAL GLAZE 220	5% 1/10W
R020	1-216-033-00	METAL GLAZE 220	5% 1/10W
R021	1-216-033-00	METAL GLAZE 220	5% 1/10W
R022	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R023	1-216-121-91	METAL GLAZE 1M	5% 1/10W
R024	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R025	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R026	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R027	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R028	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R029	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R030	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R031	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R032	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R033	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R034	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R035	1-216-033-00	METAL GLAZE 220	5% 1/10W
R036	1-216-025-91	METAL GLAZE 100	5% 1/10W
R037	1-216-033-00	METAL GLAZE 220	5% 1/10W
R038	1-216-033-00	METAL GLAZE 220	5% 1/10W
R039	1-216-025-91	METAL GLAZE 100	5% 1/10W
R040	1-216-033-00	METAL GLAZE 220	5% 1/10W
R041	1-216-033-00	METAL GLAZE 220	5% 1/10W
R042	1-216-033-00	METAL GLAZE 220	5% 1/10W
R043	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R044	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R045	1-216-033-00	METAL GLAZE 220	5% 1/10W
R046	1-216-033-00	METAL GLAZE 220	5% 1/10W
R047	1-216-033-00	METAL GLAZE 220	5% 1/10W
R048	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R049	1-216-033-00	METAL GLAZE 220	5% 1/10W
R050	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R051	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R052	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R054	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R055	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R056	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R057	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R058	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R059	1-216-295-91	CONDUCTOR, CHIP	
R060	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R061	1-216-033-00	METAL GLAZE 220	5% 1/10W



REF. NO.	PART NO.	DESCRIPTION	REMARK
R062	1-216-085-00	METAL GLAZE 33K	5% 1/10W
R063	1-216-041-00	METAL GLAZE 470	5% 1/10W
R064	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R065	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R066	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R067	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R068	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R069	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R071	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R072	1-216-041-00	METAL GLAZE 470	5% 1/10W
R073	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R074	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R075	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W
R076	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R079	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R080	1-216-023-00	METAL GLAZE 82	5% 1/10W
R081	1-216-041-00	METAL GLAZE 470	5% 1/10W
R082	1-216-093-00	METAL GLAZE 68K	5% 1/10W
R083	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R084	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R085	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R086	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R087	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R088	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R089	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R090	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R091	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R092	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R093	1-216-295-91	CONDUCTOR, CHIP	
R094	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R095	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R096	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R097	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R098	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R099	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R100	1-216-295-91	CONDUCTOR, CHIP	
R101	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R102	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R103	1-216-045-00	METAL GLAZE 680	5% 1/10W
R104	1-216-033-00	METAL GLAZE 220	5% 1/10W
R106	1-216-033-00	METAL GLAZE 220	5% 1/10W
R107	1-216-033-00	METAL GLAZE 220	5% 1/10W
R108	1-216-033-00	METAL GLAZE 220	5% 1/10W
R109	1-216-033-00	METAL GLAZE 220	5% 1/10W
R110	1-216-033-00	METAL GLAZE 220	5% 1/10W
R111	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R112	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R113	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R114	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R115	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R116	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R117	1-216-047-91	METAL GLAZE 820	5% 1/10W
R118	1-216-047-91	METAL GLAZE 820	5% 1/10W
R119	1-216-047-91	METAL GLAZE 820	5% 1/10W
R120	1-216-033-00	METAL GLAZE 220	5% 1/10W
R122	1-216-033-00	METAL GLAZE 220	5% 1/10W
R123	1-216-033-00	METAL GLAZE 220	5% 1/10W
R124	1-216-033-00	METAL GLAZE 220	5% 1/10W
R300	1-216-025-91	METAL GLAZE 100	5% 1/10W
R301	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
R302	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R303	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R304	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R305	1-216-025-91	METAL GLAZE 100	5% 1/10W
R306	1-216-025-91	METAL GLAZE 100	5% 1/10W
R307	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R308	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R309	1-216-025-91	METAL GLAZE 100	5% 1/10W
R310	1-216-081-00	METAL GLAZE 22K	5% 1/10W

REF. NO.	PART NO.	DESCRIPTION	REMARK
R311	1-216-025-91	METAL GLAZE 100	5% 1/10W
R312	1-216-033-00	METAL GLAZE 220	5% 1/10W
R313	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R314	1-216-033-00	METAL GLAZE 220	5% 1/10W
R315	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W
R317	1-216-033-00	METAL GLAZE 220	5% 1/10W
R318	1-216-071-00	METAL GLAZE 8.2K	5% 1/10W
R319	1-216-190-00	METAL GLAZE 470	5% 1/8W
R320	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R321	1-216-190-00	METAL GLAZE 470	5% 1/8W
R323	1-216-295-91	CONDUCTOR, CHIP	
R324	1-216-025-91	METAL GLAZE 100	5% 1/10W
R325	1-216-043-91	METAL GLAZE 560	5% 1/10W
R326	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R327	1-216-033-00	METAL GLAZE 220	5% 1/10W
R328	1-216-025-91	METAL GLAZE 100	5% 1/10W
R329	1-216-085-00	METAL GLAZE 33K	5% 1/10W
R330	1-216-039-00	METAL GLAZE 390	5% 1/10W
R331	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
R332	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R333	1-208-810-11	METAL CHIP 15K	0.50% 1/10W
R335	1-216-033-00	METAL GLAZE 220	5% 1/10W
R336	1-216-033-00	METAL GLAZE 220	5% 1/10W
R337	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R338	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R339	1-216-655-11	METAL CHIP 1.5K	0.50% 1/10W
R340	1-216-033-00	METAL GLAZE 220	5% 1/10W
R341	1-216-033-00	METAL GLAZE 220	5% 1/10W
R342	1-216-033-00	METAL GLAZE 220	5% 1/10W
R343	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R344	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R345	1-216-025-91	METAL GLAZE 100	5% 1/10W
R346	1-216-037-00	METAL GLAZE 330	5% 1/10W
R347	1-216-041-00	METAL GLAZE 470	5% 1/10W
R348	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R352	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R353	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W
R354	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W
R355	1-216-071-00	METAL GLAZE 8.2K	5% 1/10W
R356	1-216-031-00	METAL GLAZE 180	5% 1/10W
R357	1-216-031-00	METAL GLAZE 180	5% 1/10W
R358	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R359	1-216-037-00	METAL GLAZE 330	5% 1/10W
R360	1-216-035-00	METAL GLAZE 270	5% 1/10W
R361	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R362	1-216-035-00	METAL GLAZE 270	5% 1/10W
R363	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R364	1-216-025-91	METAL GLAZE 100	5% 1/10W
R366	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W
R367	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R368	1-216-025-91	METAL GLAZE 100	5% 1/10W
R369	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W
R370	1-216-033-00	METAL GLAZE 220	5% 1/10W
R371	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R372	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W
R373	1-216-035-00	METAL GLAZE 270	5% 1/10W
R374	1-216-085-00	METAL GLAZE 33K	5% 1/10W
R375	1-216-075-00	METAL GLAZE 12K	5% 1/10W
R376	1-216-093-00	METAL GLAZE 68K	5% 1/10W
R377	1-216-043-91	METAL GLAZE 560	5% 1/10W
R378	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
R379	1-216-083-00	METAL GLAZE 27K	5% 1/10W
R380	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R381	1-216-071-00	METAL GLAZE 8.2K	5% 1/10W
R382	1-216-085-00	METAL GLAZE 33K	5% 1/10W
R383	1-216-043-91	METAL GLAZE 560	5% 1/10W
R384	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W
R385	1-216-085-00	METAL GLAZE 33K	5% 1/10W



The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	REMARK
R386	1-216-121-91	METAL GLAZE 1M	5% 1/10W
R387	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R388	1-216-025-91	METAL GLAZE 100	5% 1/10W
R389	1-216-033-00	METAL GLAZE 220	5% 1/10W
R390	1-216-033-00	METAL GLAZE 220	5% 1/10W
R391	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W
R392	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
R393	1-216-049-91	METAL GLAZE 1K	5% 1/10W

R394 1-216-295-91 CONDUCTOR, CHIP

<CRYSTAL>

X001 1-579-917-11 VIBRATOR, CRYSTAL  
X301 1-577-611-11 OSCILLATOR, CERAMIC  
X302 1-567-505-11 OSCILLATOR, CRYSTAL

\*\*\*\*\*

\* A-1316-257-A G BOARD, COMPLETE  
\*\*\*\*\*

\* 4-047-936-01 PLATE, SHIELD, PIT  
4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C601	$\Delta$ 1-136-311-51	FILM	0.47MF	20%	125V
C602	$\Delta$ 1-113-920-91	ELECT	0.0022MF	20%	250V
C603	$\Delta$ 1-113-920-91	ELECT	0.0022MF	20%	250V
C604	$\Delta$ 1-125-692-11	ELECT(BLOCK)	820MF	20%	200V
C605	$\Delta$ 1-125-692-11	ELECT(BLOCK)	820MF	20%	200V
C608	1-164-645-11	CERAMIC	1000PF	10%	500V
C609	1-164-645-11	CERAMIC	1000PF	10%	500V
C610	1-136-173-00	FILM	0.47MF	5%	50V
C611	1-136-171-00	FILM	0.33MF	5%	50V
C612	1-136-173-00	FILM	0.47MF	5%	50V
C613	1-136-171-00	FILM	0.33MF	5%	50V
C614	1-164-735-11	CAPACITOR	0.0015MF	10%	500V
C615	1-129-720-00	FILM	0.033MF	5%	630V
C616	$\Delta$ 1-136-311-51	FILM	0.47MF	20%	125V
C618	$\Delta$ 1-113-910-91	ELECT	470PF	10%	250V
C619	$\Delta$ 1-113-910-91	ELECT	470PF	10%	250V
C651	1-128-548-11	ELECT	4700MF	20%	25V
C652	1-128-548-11	ELECT	4700MF	20%	25V
C653	1-162-318-11	CERAMIC	0.001MF	10%	500V
C656	1-128-548-11	ELECT	4700MF	20%	25V
C657	1-126-926-11	ELECT	1000MF	20%	10V
C658	1-126-768-11	ELECT	2200MF	20%	16V
C659	1-126-944-11	ELECT	3300MF	20%	25V
C660	1-164-644-11	CERAMIC	330PF	10%	500V
C661	1-123-024-21	ELECT	33MF	160V	
C662	1-107-636-11	ELECT	10MF	20%	160V
C663	1-126-948-11	ELECT	100MF	20%	35V
C664	1-126-235-11	ELECT	100MF	20%	6.3V
C665	1-126-964-11	ELECT	10MF	20%	50V
C667	1-126-951-11	ELECT	470MF	20%	35V
C668	1-104-664-11	ELECT	47MF	20%	25V
C669	1-162-318-11	CERAMIC	0.001MF	10%	500V
C670	1-104-664-11	ELECT	47MF	20%	25V
C671	1-104-664-11	ELECT	47MF	20%	25V
C672	1-104-665-11	ELECT	100MF	20%	25V
C673	1-104-664-11	ELECT	47MF	20%	25V
C674	1-104-664-11	ELECT	47MF	20%	25V
C675	1-104-664-11	ELECT	47MF	20%	25V
C676	1-104-664-11	ELECT	47MF	20%	25V
C677	1-125-473-11	ELECT(BLOCK)	1000MF	20%	160V
C678	1-107-635-11	ELECT	4.7MF	20%	160V
C679	1-164-644-11	CERAMIC	330PF	10%	500V

REF. NO.	PART NO.	DESCRIPTION	REMARK
C680	1-124-903-11	ELECT	1MF 20% 50V
C682	1-124-903-11	ELECT	1MF 20% 50V
C683	1-107-635-11	ELECT	4.7MF 20% 160V

C690	1-126-934-11	ELECT	220MF 20% 16V
C691	1-126-964-11	ELECT	10MF 20% 50V

<CONNECTOR>

CN606 1-695-915-11 TAB (CONTACT)  
CN609 \* 1-564-507-11 PLUG, CONNECTOR 4P  
CN610 \* 1-573-963-11 PIN, CONNECTOR (PC BOARD) 3P  
CN615 1-695-915-11 TAB (CONTACT)  
CN616 \* 1-564-507-11 PLUG, CONNECTOR 4P

CN617 \* 1-580-843-11 PIN, CONNECTOR (POWER)  
CN624 \* 1-564-507-11 PLUG, CONNECTOR 4P  
CN625 \* 1-564-513-11 PLUG, CONNECTOR 10P  
CN626 \* 1-564-506-11 PLUG, CONNECTOR 3P  
CN653 \* 1-564-507-11 PLUG, CONNECTOR 4P

CN681 \* 1-573-986-11 PIN, CONNECTOR (PC BOARD) 5P

<DIODE>

D601  $\Delta$  8-719-052-29 DIODE LN4SB60-F  
D604 8-719-991-33 DIODE 1SS133T-77  
D605 8-719-991-33 DIODE 1SS133T-77  
D606 8-719-991-33 DIODE 1SS133T-77  
D607 8-719-991-33 DIODE 1SS133T-77

D608 8-719-991-33 DIODE 1SS133T-77  
D609 8-719-991-33 DIODE 1SS133T-77  
D610 8-719-991-33 DIODE 1SS133T-77  
D611 8-719-991-33 DIODE 1SS133T-77  
D651 8-719-052-91 DIODE D4SBS4-F

D655 8-719-052-92 DIODE D10SBS4F  
D656 8-719-022-97 DIODE D2S4MF  
D657 8-719-022-97 DIODE D2S4MF  
D658 8-719-022-97 DIODE D2S4MF  
D659 8-719-022-97 DIODE D2S4MF

D660 8-719-052-86 DIODE D2L40-TA  
D661 8-719-052-86 DIODE D2L40-TA  
D662 8-719-052-31 DIODE D1NL40-TR2  
D663 8-719-052-31 DIODE D1NL40-TR2  
D664 8-719-510-26 DIODE D1NL20-TA

D665 8-719-991-33 DIODE 1SS133T-77  
D666 8-719-110-58 DIODE RD2ESB3  
D667 8-719-921-80 DIODE MTZJ-11B  
D669 8-719-991-33 DIODE 1SS133T-77  
D670 8-719-110-41 DIODE RD15ESB2

D671 8-719-991-33 DIODE 1SS133T-77  
D672 8-719-109-54 DIODE RD2.2ESB2  
D673 8-719-110-49 DIODE RD18ESB2  
D674 8-719-991-33 DIODE 1SS133T-77  
D675 8-719-109-85 DIODE RD5.1ESB2

D676 8-719-991-33 DIODE 1SS133T-77  
D677 8-719-991-33 DIODE 1SS133T-77  
D678 8-719-991-33 DIODE 1SS133T-77  
D679 8-719-991-33 DIODE 1SS133T-77  
D680 8-719-200-82 DIODE 11ES2

D681 8-719-200-82 DIODE 11ES2  
D682 8-719-200-82 DIODE 11ES2  
D683 8-719-200-82 DIODE 11ES2  
D685 8-719-991-33 DIODE 1SS133T-77  
D686 8-719-991-33 DIODE 1SS133T-77

D687 8-719-109-85 DIODE RD5.1ESB2  
D688 8-719-991-33 DIODE 1SS133T-77  
D689 8-719-991-33 DIODE 1SS133T-77  
D690 8-719-109-89 DIODE RD5.6ESB2  
D691 8-719-991-33 DIODE 1SS133T-77

D693 8-719-991-33 DIODE 1SS133T-77



Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

REF. NO. PART NO. DESCRIPTION REMARK

<FUSE>

F601  $\Delta$  1-576-193-11 FUSE 6.3A/125V  
1-533-223-11 CLIP, FUSE ; F601

<FERRITE BEAD>

FB651 1-410-396-41 FERRITE BEAD INDUCTOR 0.45UH  
FB652 1-410-396-41 FERRITE BEAD INDUCTOR 0.45UH

<IC>

IC651  $\Delta$  1-810-051-11 POWER MODULE DM-48  
IC652 8-759-279-76 IC MCT7812CT

<COIL>

L651 1-403-588-11 CIL, CHOKE 22UH  
L652 1-403-588-11 CIL, CHOKE 22UH  
L653 1-412-519-11 INDUCTOR 3.3UH  
L654 1-403-588-11 CIL, CHOKE 22UH  
L655 1-403-588-11 CIL, CHOKE 22UH

L656 1-412-519-11 INDUCTOR 3.3UH  
L657 1-403-588-11 CIL, CHOKE 22UH  
L658 1-403-588-11 CIL, CHOKE 22UH

<TRANSISTOR>

Q601 8-729-019-49 TRANSISTOR 2SC4834M  
Q602 8-729-019-49 TRANSISTOR 2SC4834M  
Q651 8-729-820-82 TRANSISTOR 2SA1208-S  
Q652 8-729-119-76 TRANSISTOR 2SA1175-HFE  
Q653 8-729-230-45 TRANSISTOR 2SC2458-YGR

Q654 8-729-119-76 TRANSISTOR 2SA1175-HFE  
Q655 8-729-230-45 TRANSISTOR 2SC2458-YGR  
Q656 8-729-119-76 TRANSISTOR 2SA1175-HFE  
Q657 8-729-119-78 TRANSISTOR 2SC2785-HFE  
Q658 8-729-119-76 TRANSISTOR 2SA1175-HFE

Q659 8-729-119-76 TRANSISTOR 2SA1175-HFE  
Q660 8-729-119-76 TRANSISTOR 2SA1175-HFE  
Q661 8-729-119-76 TRANSISTOR 2SA1175-HFE  
Q662 8-729-119-76 TRANSISTOR 2SA1175-HFE  
Q663 8-729-119-76 TRANSISTOR 2SA1175-HFE

<RESISTOR>

R602  $\Delta$  1-219-236-91 SOLID 2.2M 20% 1/2W  
R603  $\Delta$  1-205-997-11 WIREWOUND 2.2 5% 10W  
R604  $\Delta$  1-247-891-91 CARBON 330K 5% 1/4W  
R605  $\Delta$  1-247-891-91 CARBON 330K 5% 1/4W  
R606  $\Delta$  1-202-933-61 FUSIBLE 0.1 10% 1/2W F

R607 1-247-891-00 CARBON 330K 5% 1/4W  
R608 1-247-891-00 CARBON 330K 5% 1/4W  
R609 1-216-369-00 METAL OXIDE 1 5% 2W F  
R610 1-247-891-00 CARBON 330K 5% 1/4W  
R611 1-247-891-00 CARBON 330K 5% 1/4W

R612 1-216-369-00 METAL OXIDE 1 5% 2W F  
R613 1-247-791-91 CARBON 22 5% 1/4W  
R614 1-247-791-91 CARBON 22 5% 1/4W  
R615 1-247-791-91 CARBON 22 5% 1/4W  
R616 1-247-791-91 CARBON 22 5% 1/4W

R631 1-247-863-91 CARBON 22K 5% 1/4W  
R632 1-247-807-31 CARBON 100 5% 1/4W  
R633 1-247-807-31 CARBON 100 5% 1/4W  
R634 1-249-417-11 CARBON 1K 5% 1/4W  
R635 1-249-425-11 CARBON 4.7K 5% 1/4W

R636 1-249-413-11 CARBON 470 5% 1/4W  
R651 1-216-370-11 METAL OXIDE 1.2 5% 2W F  
R653 1-249-418-11 CARBON 1.2K 5% 1/4W F  
R654 1-215-473-00 METAL 150K 1% 1/4W

REF. NO. PART NO. DESCRIPTION REMARK

R655 1-249-441-11 CARBON 100K 5% 1/4W  
R656 1-216-369-00 METAL OXIDE 1 5% 2W F  
R657 1-249-429-11 CARBON 10K 5% 1/4W  
R658 1-247-883-00 CARBON 150K 5% 1/4W  
R659 1-249-417-11 CARBON 1K 5% 1/4W F  
R660 1-249-417-11 CARBON 1K 5% 1/4W

R661 1-215-471-00 METAL 120K 1% 1/4W  
R662  $\Delta$  1-215-452-91 METAL 20K 1% 1/4W  
R663 1-215-421-00 METAL 1K 1% 1/4W  
R664 1-249-429-11 CARBON 10K 5% 1/4W  
R665 1-249-425-11 CARBON 4.7K 5% 1/4W

R666 1-249-429-11 CARBON 10K 5% 1/4W  
R667 1-249-429-11 CARBON 10K 5% 1/4W  
R668 1-215-487-00 METAL 560K 1% 1/4W  
R670 1-247-895-91 CARBON 470K 5% 1/4W  
R671 1-249-429-11 CARBON 10K 5% 1/4W

R672 1-247-807-31 CARBON 100 5% 1/4W  
R673 1-249-423-11 CARBON 3.3K 5% 1/4W  
R674 1-249-413-11 CARBON 470 5% 1/4W  
R675 1-249-429-11 CARBON 10K 5% 1/4W  
R676 1-249-421-11 CARBON 2.2K 5% 1/4W

R677 1-249-417-11 CARBON 1K 5% 1/4W  
R678 1-249-423-11 CARBON 3.3K 5% 1/4W  
R679 1-249-423-11 CARBON 3.3K 5% 1/4W  
R680 1-249-413-11 CARBON 470 5% 1/4W  
R681 1-249-425-11 CARBON 4.7K 5% 1/4W

R682 1-249-403-11 CARBON 68 5% 1/4W  
R683 1-249-417-11 CARBON 1K 5% 1/4W  
R684 1-249-417-11 CARBON 1K 5% 1/4W  
R685 1-247-863-91 CARBON 22K 5% 1/4W  
R686 1-249-429-11 CARBON 10K 5% 1/4W

R687 1-249-423-11 CARBON 3.3K 5% 1/4W  
R688 1-249-423-11 CARBON 3.3K 5% 1/4W  
R689 1-249-429-11 CARBON 10K 5% 1/4W  
R690 1-247-863-91 CARBON 22K 5% 1/4W  
R691 1-249-417-11 CARBON 1K 5% 1/4W

R693 1-249-425-11 CARBON 4.7K 5% 1/4W  
R694 1-249-425-11 CARBON 4.7K 5% 1/4W  
R695 1-249-429-11 CARBON 10K 5% 1/4W  
R697 1-249-413-11 CARBON 470 5% 1/4W  
R698 1-249-429-11 CARBON 10K 5% 1/4W

R699 1-249-417-11 CARBON 1K 5% 1/4W

<RELAY>

RY601  $\Delta$  1-755-032-11 RELAY  
RY602  $\Delta$  1-755-032-11 RELAY

<TRANSFORMER>

T601  $\Delta$  1-427-850-11 TRANSFORMER, LINE FILTER  
T602  $\Delta$  1-429-728-11 TRANSFORMER, CONVERTER (PIT)  
T603  $\Delta$  1-423-665-11 TRANSFORMER, POWER  
T604  $\Delta$  1-427-864-11 TRANSFORMER, CONVERTER (PRT)  
T605  $\Delta$  1-427-850-11 TRANSFORMER, LINE FILTER

\*\*\*\*\*

\* A-1331-498-A CR BOARD, COMPLETE  
\*\*\*\*\*

<CAPACITOR>

C701 1-104-664-11 ELECT 47MF 20% 25V  
C702 1-107-662-11 ELECT 22MF 20% 250V  
C703 1-161-754-00 CERAMIC 0.001MF 10% 2KV  
C704 1-126-768-11 ELECT 2200MF 20% 16V

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	REMARK		
C705	1-102-050-00	CERAMIC	0.01MF		500V
C706	1-102-953-00	CERAMIC	18PF	5%	50V
C707	1-102-129-00	CERAMIC	0.01MF	10%	50V
C708	1-104-664-11	ELECT	47MF	20%	25V
C709	1-107-651-11	ELECT	4.7MF	20%	250V
C710	1-102-157-00	CERAMIC	560PF	10%	500V
C714	1-162-115-00	CERAMIC	330PF	10%	2KV
C715	1-101-005-00	CERAMIC	0.022MF		50V
C716	1-102-050-00	CERAMIC	0.01MF		500V
<CONNECTOR>					
CN701	* 1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P			
CN702	* 1-564-510-11	PLUG, CONNECTOR 7P			
CN703	* 1-564-512-11	PLUG, CONNECTOR 9P			
CN704	* 1-564-512-11	PLUG, CONNECTOR 9P			
CN705	* 1-564-511-11	PLUG, CONNECTOR 8P			
CN706	1-695-915-11	TAB (CONTACT)			
CN708	A 1-251-179-11	SOCKET, PICTURE TUBE			
CN709	* 1-564-506-11	PLUG, CONNECTOR 3P			
<DIODE>					
D701	8-719-991-33	DIODE 1SS133T-77			
D702	8-719-991-33	DIODE 1SS133T-77			
D703	8-719-991-33	DIODE 1SS133T-77			
D704	8-719-921-86	DIODE MTZJ-13			
D705	8-719-210-21	DIODE 11EQS04			
D706	8-719-991-33	DIODE 1SS133T-77			
D707	8-719-921-86	DIODE MTZJ-13			
D708	8-719-901-83	DIODE 1SS83			
D710	8-719-109-89	DIODE RD5.6ESB2			
D711	8-719-991-33	DIODE 1SS133T-77			
D713	8-719-510-48	DIODE D1N20R			
D716	8-719-921-86	DIODE MTZJ-13			
D717	8-719-921-86	DIODE MTZJ-13			
<IC>					
IC701	8-759-346-42	IC TDA6101Q/N3			
<COIL>					
L701	1-408-429-00	INDUCTOR 470UH			
<NEON LAMP>					
NL701	1-519-108-XX	LAMP, NEON			
<TRANSISTOR>					
Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE			
<RESISTOR>					
R701	1-215-411-00	METAL	390	1%	1/4W
R702	1-215-414-00	METAL	510	1%	1/4W
R704	1-202-847-00	SOLID	560K	20%	1/2W
R706	1-249-407-11	CARBON	150	5%	1/4W
R707	1-215-423-00	METAL	1.2K	1%	1/4W
R708	1-202-883-11	SOLID	680K	20%	1/2W
R709	1-215-437-00	METAL	4.7K	1%	1/4W
R710	1-215-427-00	METAL	1.8K	1%	1/4W
R711	1-215-427-00	METAL	1.8K	1%	1/4W
R712	1-215-903-11	METAL OXIDE	68K	5%	2W
R713	1-202-818-00	SOLID	1K	20%	1/2W
R714	1-202-818-00	SOLID	1K	20%	1/2W
R715	1-249-436-11	CARBON	39K	5%	1/4W

REF. NO.	PART NO.	DESCRIPTION	REMARK		
R716	1-249-437-11	CARBON	47K	5%	1/4W
R718	1-249-417-11	CARBON	1K	5%	1/4W
R719	1-247-807-31	CARBON	100	5%	1/4W
R720	1-249-437-11	CARBON	47K	5%	1/4W
R721	1-202-549-00	SOLID	100	20%	1/2W
R722	1-202-549-00	SOLID	100	20%	1/2W
<SPARK GAP>					
SG701	1-519-422-11	GAP, SPARK			
SG702	1-519-422-11	GAP, SPARK			
SG703	1-519-422-11	GAP, SPARK			
*****					
* A-1331-499-A CG BOARD, COMPLETE					
*****					
<CAPACITOR>					
C731	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C732	1-107-662-11	ELECT	22MF	20%	250V
C733	1-102-050-00	CERAMIC	0.01MF		500V
C736	1-126-964-11	ELECT	10MF	20%	50V
C738	1-107-651-11	ELECT	4.7MF	20%	250V
C739	1-102-965-00	CERAMIC	39PF	5%	50V
C740	1-126-964-11	ELECT	10MF	20%	50V
C741	1-102-157-00	CERAMIC	560PF	10%	500V
C742	1-162-115-00	CERAMIC	330PF	10%	2KV
C743	1-101-005-00	CERAMIC	0.022MF		50V
C744	1-102-050-00	CERAMIC	0.01MF		500V
<CONNECTOR>					
CN731	* 1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P			
CN732	* 1-564-512-11	PLUG, CONNECTOR 9P			
CN733	* 1-564-512-11	PLUG, CONNECTOR 9P			
CN734	* 1-564-511-11	PLUG, CONNECTOR 8P			
CN735	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN736	1-695-915-11	TAB (CONTACT)			
CN738	A 1-251-179-11	SOCKET, PICTURE TUBE			
<DIODE>					
D731	8-719-921-86	DIODE MTZJ-13			
D732	8-719-901-83	DIODE 1SS83			
D736	8-719-510-48	DIODE D1N20R			
D737	8-719-921-86	DIODE MTZJ-13			
<IC>					
IC731	8-759-346-42	IC TDA6101Q/N3			
<COIL>					
L731	1-408-429-00	INDUCTOR 470UH			
<NEON LAMP>					
NL731	1-519-108-XX	LAMP, NEON			
<RESISTOR>					
R731	1-202-847-00	SOLID	560K	20%	1/2W
R733	1-202-883-11	SOLID	680K	20%	1/2W
R734	1-202-818-00	SOLID	1K	20%	1/2W
R735	1-249-407-11	CARBON	150	5%	1/4W

**CG**

**CB**

**E**

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
R736	1-249-441-11	CARBON 100K 5%	1/4W
R737	1-202-818-00	SOLID 1K 20%	1/2W
R738	1-202-549-00	SOLID 100 20%	1/2W
R739	1-215-420-00	METAL 910 1%	1/4W
R740	1-215-427-00	METAL 1.8K 1%	1/4W
R741	1-249-437-11	CARBON 47K 5%	1/4W
R742	1-215-903-11	METAL OXIDE 68K 5%	2W F

<SPARK GAP>

SG731	1-519-422-11	GAP, SPARK
SG732	1-519-422-11	GAP, SPARK
SG733	1-519-422-11	GAP, SPARK

\*\*\*\*\*

\* A-1331-500-A CB BOARD, COMPLETE  
\*\*\*\*\*

<CAPACITOR>

C761	1-161-754-00	CERAMIC 0.001MF 10%	2KV
C762	1-107-662-11	ELECT 22MF 20%	250V
C763	1-102-050-00	CERAMIC 0.01MF	500V
C766	1-107-651-11	ELECT 4.7MF 20%	250V
C769	1-102-965-00	CERAMIC 39PF 5%	50V
C770	1-126-964-11	ELECT 10MF 20%	50V
C771	1-102-157-00	CERAMIC 560PF 10%	500V
C772	1-162-115-00	CERAMIC 330PF 10%	2KV
C773	1-101-005-00	CERAMIC 0.022MF	50V
C774	1-102-050-00	CERAMIC 0.01MF	500V

<CONNECTOR>

CN761	* 1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P
CN762	* 1-564-512-11	PLUG, CONNECTOR 9P
CN763	* 1-564-509-11	PLUG, CONNECTOR 6P
CN766	1-695-915-11	TAB (CONTACT)
CN768	$\Delta$ 1-251-179-11	SOCKET, PICTURE TUBE

<DIODE>

D761	8-719-921-86	DIODE MTZJ-13
D762	8-719-901-83	DIODE 1SS83
D763	8-719-991-33	DIODE 1SS133T-77
D764	8-719-921-86	DIODE MTZJ-13
D765	8-719-921-86	DIODE MTZJ-13
D768	8-719-510-48	DIODE D1N20R
D769	8-719-921-86	DIODE MTZJ-13

<IC>

IC761	8-759-346-42	IC TDA6101Q/N3
-------	--------------	----------------

<COIL>

L761	1-408-429-00	INDUCTOR 470UH
------	--------------	----------------

<NEON LAMP>

NL760	1-519-108-99	LAMP, NEON
-------	--------------	------------

<RESISTOR>

R761	1-202-847-00	SOLID 560K 20%	1/2W
R763	1-202-883-11	SOLID 680K 20%	1/2W
R764	1-202-818-00	SOLID 1K 20%	1/2W

REF. NO.	PART NO.	DESCRIPTION	REMARK
R767	1-202-818-00	SOLID 1K 20%	1/2W
R768	1-202-549-00	SOLID 100 20%	1/2W
R769	1-215-421-00	METAL 1K 1%	1/4W
R770	1-249-426-11	CARBON 5.6K 5%	1/4W
R771	1-215-427-00	METAL 1.8K 1%	1/4W
R773	1-215-903-11	METAL OXIDE 68K 5%	2W F
R774	1-249-407-11	CARBON 150 5%	1/4W
R775	1-202-549-00	SOLID 100 20%	1/2W

<SPARK GAP>

SG761	1-519-422-11	GAP, SPARK
SG762	1-519-422-11	GAP, SPARK
SG763	1-519-422-11	GAP, SPARK

\*\*\*\*\*

\* A-1341-885-A E BOARD, COMPLETE  
\*\*\*\*\*

4-382-854-11 SCREW (M3X10), P, SW (+)  
7-322-065-19 RUBBER, SILICON RTV (KE490W)

<CAPACITOR>

C801	1-110-626-11	ELECT 330MF 20%	160V
C802	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C803	1-110-626-11	ELECT 330MF 20%	160V
C805	1-136-173-00	FILM 0.47MF 5%	50V
C806	1-102-030-00	CERAMIC 330PF 10%	500V
C807	1-106-387-00	MYLAR 0.068MF 10%	200V
C808	1-107-636-11	ELECT 10MF 20%	160V
C809	1-104-664-11	ELECT 47MF 20%	25V
C810	1-130-481-00	FILM 0.0068MF 5%	50V
C811	1-137-475-11	FILM 2.2MF 10%	250V
C812	1-126-965-11	ELECT 22MF 20%	50V
C813	1-162-318-11	CERAMIC 0.001MF 10%	500V
C814	1-126-968-11	ELECT 100MF 20%	50V
C815	1-162-114-00	CERAMIC 0.0047MF	2KV
C818	$\Delta$ 1-109-833-11	FILM 0.0145MF 3%	2.5KV

C819	1-130-489-00	FILM 0.033MF 5%	50V
C820	1-124-902-00	ELECT 0.47MF 20%	50V
C823	1-136-601-11	FILM 0.01MF 5%	630V
C824	1-126-964-11	ELECT 10MF 20%	50V
C825	1-162-318-11	CERAMIC 0.001MF 10%	500V

C826	1-130-467-00	FILM 470PF 5%	50V
C827	1-107-651-11	ELECT 4.7MF 20%	250V
C828	1-111-036-11	ELECT 470MF 20%	16V
C830	1-137-420-11	FILM 0.047MF 10%	100V
C831	1-126-934-11	ELECT 220MF 20%	16V

C832	1-126-967-11	ELECT 47MF 20%	50V
C901	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C902	1-137-370-11	FILM 0.01MF 5%	50V
C903	1-137-431-11	FILM 560PF 5%	50V
C904	1-137-358-11	FILM 0.0001MF 5%	50V

C905	1-104-665-11	ELECT 100MF 20%	25V
C906	1-137-370-11	FILM 0.01MF 5%	50V
C907	1-104-665-11	ELECT 100MF 20%	25V
C908	1-137-361-11	FILM 330PF 5%	50V
C909	1-124-903-11	ELECT 1MF 20%	50V

C911	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C912	1-124-903-11	ELECT 1MF 20%	50V
C913	1-124-903-11	ELECT 1MF 20%	50V
C915	1-163-239-11	CERAMIC CHIP 33PF 5%	50V
C916	1-126-963-11	ELECT 4.7MF 20%	50V

C917	1-126-964-11	ELECT 10MF 20%	50V
C918	1-137-364-11	FILM 0.001MF 5%	50V
C919	1-126-964-11	ELECT 10MF 20%	50V



REF. NO.	PART NO.	DESCRIPTION	REMARK
C920	1-124-902-00	ELECT	0.47MF 20% 50V
C921	1-126-964-11	ELECT	10MF 20% 50V
C923	1-126-964-11	ELECT	10MF 20% 50V
C924	1-126-935-11	ELECT	470MF 20% 16V
C925	1-137-372-11	FILM	0.022MF 5% 50V
C926	1-104-665-11	ELECT	100MF 20% 25V
C927	1-137-364-11	FILM	0.001MF 5% 50V
C929	1-137-416-11	FILM	0.01MF 10% 100V
C930	1-137-364-11	FILM	0.001MF 5% 50V
C931	1-126-967-11	ELECT	47MF 20% 50V
C932	1-124-903-11	ELECT	1MF 20% 50V
C934	1-137-370-11	FILM	0.01MF 5% 50V
C935	1-137-399-11	FILM	0.1MF 10% 100V
C936	1-126-964-11	ELECT	10MF 20% 50V
C937	1-126-964-11	ELECT	10MF 20% 50V
C938	1-126-935-11	ELECT	470MF 20% 16V
C939	1-126-964-11	ELECT	10MF 20% 50V
C940	1-104-664-11	ELECT	47MF 20% 25V
C941	1-126-964-11	ELECT	10MF 20% 50V
C942	1-104-664-11	ELECT	47MF 20% 25V
C943	1-126-965-11	ELECT	22MF 20% 50V
C944	1-126-964-11	ELECT	10MF 20% 50V
C945	1-126-964-11	ELECT	10MF 20% 50V
C946	1-124-925-11	ELECT	2.2MF 20% 50V
C947	1-104-665-11	ELECT	100MF 20% 25V
C948	1-104-665-11	ELECT	100MF 20% 25V
C949	1-126-964-11	ELECT	10MF 20% 50V
C950	1-126-964-11	ELECT	10MF 20% 50V
C951	1-109-889-11	ELECT	1MF 20% 50V
C955	1-126-964-11	ELECT	10MF 20% 50V
C980	1-137-368-11	FILM	0.0047MF 5% 50V
<CHIP CONDUCTOR>			
CJ901	1-216-295-91	CONDUCTOR, CHIP	
CJ902	1-216-295-91	CONDUCTOR, CHIP	
CJ903	1-216-295-91	CONDUCTOR, CHIP	
CJ904	1-216-295-91	CONDUCTOR, CHIP	
<CONNECTOR>			
CN802	* 1-564-510-11	PLUG, CONNECTOR 7P	
CN805	1-695-915-11	TAB (CONTACT)	
CN827	* 1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
CN851	* 1-564-509-11	PLUG, CONNECTOR 6P	
CN881	* 1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P	
CN882	* 1-691-135-11	PIN, CONNECTOR (PC BOARD) 4P	
CN884	* 1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P	
CN885	* 1-506-371-00	PIN, CONNECTOR 2P	
CN886	* 1-506-371-00	PIN, CONNECTOR 2P	
CN904	* 1-564-507-11	PLUG, CONNECTOR 4P	
<DIODE>			
D801	8-719-109-85	DIODE RD5.1ESB2	
D802	8-719-404-46	DIODE MA110	
D803	8-719-971-20	DIODE ERC38-06	
D804	8-719-908-03	DIODE GP08D	
D805	8-719-945-80	DIODE ERC06-15S	
D806	8-719-991-33	DIODE 1SS133T-77	
D807	8-719-945-80	DIODE ERC06-15S	
D808	8-719-500-71	DIODE D8LC40	
D809	8-719-991-33	DIODE 1SS133T-77	
D810	8-719-945-80	DIODE ERC06-15S	
D811	8-719-979-85	DIODE EGP20G-PKG23	
D812	8-719-404-46	DIODE MA110	
D814	8-719-920-67	DIODE ERC91-02	
D816	8-719-404-46	DIODE MA110	
D817	8-719-404-46	DIODE MA110	

REF. NO.	PART NO.	DESCRIPTION	REMARK
D818	8-719-404-46	DIODE MA110	
D819	8-719-105-82	DIODE RD5.1M-B2	
D901	8-719-404-46	DIODE MA110	
D902	8-719-404-46	DIODE MA110	
D904	8-719-404-46	DIODE MA110	
D905	8-719-404-46	DIODE MA110	
D907	8-719-404-46	DIODE MA110	
D908	8-719-105-82	DIODE RD5.1M-B2	
D909	8-719-302-43	DIODE EL1Z	
D911	8-719-105-82	DIODE RD5.1M-B2	
D912	8-719-105-82	DIODE RD5.1M-B2	
D913	8-719-404-46	DIODE MA110	
D914	8-719-404-46	DIODE MA110	
D915	8-719-404-46	DIODE MA110	
D916	8-719-105-57	DIODE RD3.9M-B1	
D917	8-719-404-46	DIODE MA110	
D918	8-719-404-46	DIODE MA110	
D919	8-719-106-81	DIODE RD13M-B3	
D920	8-759-157-40	IC uPC574J	
D921	8-719-106-81	DIODE RD13M-B3	
D922	8-719-404-46	DIODE MA110	
D923	8-719-404-46	DIODE MA110	
D924	8-719-404-46	DIODE MA110	
D925	8-719-028-00	DIODE MA3033-L	
D926	8-719-404-46	DIODE MA110	
D927	8-719-401-32	DIODE MA3047M-TX	
<FERRITE BEAD>			
FB001	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
<IC>			
IC901	8-759-133-90	IC uPC339C	
IC902	8-759-133-90	IC uPC339C	
IC903	8-759-711-28	IC NJM2058D	
IC904	8-759-634-51	IC M5218AP	
IC905	8-759-929-65	IC LM7912CT	
IC906	8-759-279-76	IC MCT7812CT	
<COIL>			
L801	1-406-665-11	COIL, CHOKE 100UH	
L802	1-406-665-11	COIL, CHOKE 100UH	
L803	1-422-613-11	COIL, AIR CORE	
L804	1-411-286-11	COIL, CHOKE 220UH	
L901	1-408-416-00	INDUCTOR 39UH	
L902	1-408-416-00	INDUCTOR 39UH	
<NEON LAMP>			
NL802	1-519-108-99	LAMP, NEON	
<TRANSISTOR>			
Q801	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q802	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q803	8-729-122-12	TRANSISTOR 2SA1221-L	
Q806	8-729-805-07	TRANSISTOR 2SD1887-CA	
Q807	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q808	8-729-024-30	TRANSISTOR IRF1640LF	
Q809	8-729-823-81	TRANSISTOR 2SC4632LS-CB7	
Q810	8-729-231-55	TRANSISTOR 2SC2878-AB	
Q811	8-729-823-81	TRANSISTOR 2SC4632LS-CB7	
Q813	8-729-216-22	TRANSISTOR 2SA1162-G	
Q901	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q902	8-729-140-93	TRANSISTOR 2SB733-34	
Q903	8-729-140-96	TRANSISTOR 2SD774-34	



• The components identified by in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

Les composants identifiés par une trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q904	8-729-422-27	TRANSISTOR 2SD601A-Q		R906	1-247-739-11	CARBON 100	5% 1/2W F
Q905	8-729-422-27	TRANSISTOR 2SD601A-Q		R907	1-216-091-00	METAL GLAZE 56K	5% 1/10W
Q906	8-729-422-27	TRANSISTOR 2SD601A-Q		R908	1-216-085-00	METAL GLAZE 33K	5% 1/10W
Q907	8-729-231-55	TRANSISTOR 2SC2878-AB		R909	1-216-113-00	METAL GLAZE 470K	5% 1/10W
Q908	8-729-422-27	TRANSISTOR 2SD601A-Q		R910	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
Q909	8-729-422-27	TRANSISTOR 2SD601A-Q		R911	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
Q910	8-729-422-27	TRANSISTOR 2SD601A-Q		R912	1-216-073-00	METAL GLAZE 10K	5% 1/10W
Q911	8-729-422-27	TRANSISTOR 2SD601A-Q		R913	1-216-077-00	METAL GLAZE 15K	5% 1/10W
Q912	8-729-216-22	TRANSISTOR 2SA1162-G		R914	1-216-049-91	METAL GLAZE 1K	5% 1/10W
Q913	8-729-029-86	TRANSISTOR DTC124ESA		R915	1-216-091-00	METAL GLAZE 56K	5% 1/10W
Q914	8-729-422-27	TRANSISTOR 2SD601A-Q		R916	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
Q915	8-729-422-27	TRANSISTOR 2SD601A-Q		R917	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
<RESISTOR>				R918	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R800	1-216-637-11	METAL CHIP 270	0.50% 1/10W	R919	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R801	1-216-033-00	METAL GLAZE 220	5% 1/10W	R920	1-216-113-00	METAL GLAZE 470K	5% 1/10W
R802	1-249-421-11	CARBON 2.2K	5% 1/4W	R921	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
R804	1-249-425-11	CARBON 4.7K	5% 1/4W F	R922	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R805	1-216-435-11	METAL OXIDE 2.7K	5% 1W F	R923	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R806	1-249-431-11	CARBON 15K	5% 1/4W F	R924	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W
R807	1-260-325-11	CARBON 560	5% 1/2W	R926	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R808	1-260-325-11	CARBON 560	5% 1/2W	R927	1-249-377-11	CARBON 0.47	5% 1/4W F
R809	1-260-325-11	CARBON 560	5% 1/2W	R928	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W
R810	1-249-427-11	CARBON 6.8K	5% 1/4W F	R929	1-216-041-00	METAL GLAZE 470	5% 1/10W
R811	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R930	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R812	1-216-395-00	METAL OXIDE 3.3	5% 3W F	R931	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
R813	1-216-484-00	METAL OXIDE 3.9K	5% 3W F	R932	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
R814	1-215-919-11	METAL OXIDE 2.2K	5% 3W F	R933	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R816	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W	R934	1-216-085-00	METAL GLAZE 33K	5% 1/10W
R817	1-216-395-00	METAL OXIDE 3.3	5% 3W F	R935	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R818	1-249-405-11	CARBON 100	5% 1/4W F	R936	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R819	1-216-089-91	METAL GLAZE 47K	5% 1/10W	R937	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R820	1-215-905-11	METAL OXIDE 10	5% 3W F	R938	1-208-810-11	METAL CHIP 15K	0.50% 1/10W
R821	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R939	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R822	1-215-928-11	METAL OXIDE 68K	5% 3W F	R940	1-216-083-00	METAL GLAZE 27K	5% 1/10W
R823	1-216-041-00	METAL GLAZE 470	5% 1/10W	R941	1-216-091-00	METAL GLAZE 56K	5% 1/10W
R825	1-215-928-11	METAL OXIDE 68K	5% 3W F	R942	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R826	1-216-033-00	METAL GLAZE 220	5% 1/10W	R943	1-249-377-11	CARBON 0.47	5% 1/4W F
R830	1-215-928-11	METAL OXIDE 68K	5% 3W F	R944	1-216-689-11	METAL GLAZE 39K	5% 1/10W
R831	1-215-919-11	METAL OXIDE 2.2K	5% 3W F	R945	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R832	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R946	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R836	1-202-818-00	SOLID 1K	20% 1/2W	R947	1-216-025-91	METAL GLAZE 100	5% 1/10W
R837	1-215-870-11	METAL OXIDE 1.5K	5% 1W F	R948	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W
R838	1-247-807-31	CARBON 100	5% 1/4W	R950	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R839	1-249-429-11	CARBON 10K	5% 1/4W F	R952	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R841	1-216-491-11	METAL OXIDE 56K	5% 3W F	R954	1-214-777-00	METAL 100K	1% 1/4W
R843	1-202-549-00	SOLID 100	20% 1/2W	R955	1-214-769-00	METAL 47K	1% 1/4W
R844	1-216-491-11	METAL OXIDE 56K	5% 3W F	R956	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R846	1-202-838-00	SOLID 100K	20% 1/2W	R957	1-218-754-11	METAL CHIP 120K	0.50% 1/10W
R847	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R958	1-218-756-11	METAL CHIP 150K	0.50% 1/10W
R849	1-247-863-91	CARBON 22K	5% 1/4W	R959	1-214-757-00	METAL 15K	1% 1/4W
R850	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R960	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R851	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W	R962	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R852	1-208-806-11	METAL CHIP 10K	0.50% 1/10W	R963	1-214-749-00	METAL 6.8K	1% 1/4W
R854	1-249-447-11	CARBON 1	5% 1/4W F	R964	1-214-757-00	METAL 15K	1% 1/4W
R855	1-208-822-11	METAL CHIP 47K	0.50% 1/10W	R965	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R856	1-208-822-11	METAL CHIP 47K	0.50% 1/10W	R966	1-214-757-00	METAL 15K	1% 1/4W
R857	1-216-699-11	METAL CHIP 100K	0.50% 1/10W	R967	1-216-025-91	METAL GLAZE 100	5% 1/10W
R858	1-208-810-11	METAL CHIP 15K	0.50% 1/10W	R968	1-214-751-00	METAL 8.2K	1% 1/4W
R865	1-216-350-11	METAL OXIDE 1.2	5% 1W F	R969	1-214-731-00	METAL 1.2K	1% 1/4W
R866	1-532-781-11	FUSE, MICRO (SECONDARY) 3.15A/125V		R970	1-214-757-00	METAL 15K	1% 1/4W
R883	1-216-091-00	METAL GLAZE 56K	5% 1/10W	R971	1-216-121-91	METAL GLAZE 1M	5% 1/10W
R888	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W	R972	1-216-699-11	METAL CHIP 100K	0.50% 1/10W
R901	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R973	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R902	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R974	1-216-699-11	METAL CHIP 100K	0.50% 1/10W
R903	1-216-085-00	METAL GLAZE 33K	5% 1/10W	R975	1-216-043-91	METAL GLAZE 560	5% 1/10W
R904	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R976	1-216-041-00	METAL GLAZE 470	5% 1/10W
R905	1-247-739-11	CARBON 100	5% 1/2W F	R977	1-216-075-00	METAL GLAZE 12K	5% 1/10W
				R978	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W

The components identified by shading and mark **Δ** are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque **Δ** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

• The components identified by **☒** in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.



REF. NO.	PART NO.	DESCRIPTION	REMARK
R979	1-216-075-00	METAL GLAZE 12K	5% 1/10W
R980	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R981	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R982	1-216-671-11	METAL CHIP 6.8K	0.50% 1/10W
<b>☒</b> R983 <b>Δ</b>		METAL GLAZE	1/4W
R984	1-216-083-00	METAL GLAZE 27K	5% 1/10W
R985	1-208-812-11	METAL CHIP 18K	0.50% 1/10W
R986	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R987	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
<b>☒</b> R988 <b>Δ</b>		METAL GLAZE	1/4W
R989	1-216-462-00	METAL OXIDE 8.2K	5% 2W F
R990	1-215-897-11	METAL OXIDE 6.8K	5% 2W F
R991	1-208-801-11	METAL CHIP 6.2K	0.50% 1/10W
R992	1-249-431-11	CARBON 15K	5% 1/4W
R993	1-249-431-11	CARBON 15K	5% 1/4W
R994	1-247-807-31	CARBON 100	5% 1/4W
R995	1-216-677-11	METAL CHIP 12K	0.50% 1/10W
R996	1-208-814-11	METAL CHIP 22K	0.50% 1/10W
R997	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R998	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R999	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W
<SPARK GAP>			
SG801	1-519-422-11	GAP, SPARK	
<TRANSFORMER>			
T801	<b>Δ</b> 1-453-189-11	TRANSFORMER ASSY, FLYBACK	(NX-2631//A4S)
T802	1-437-209-11	TRANSFORMER, HORIZONTAL DRIVE	
T803	<b>Δ</b> 1-427-980-11	TRANSFORMER, FERRITE (LOT)	
*****			
* A-1346-296-A D BOARD, COMPLETE			
*****			
4-382-854-11 SCREW (M3X10), P, SW (+)			
7-682-652-09 SCREW +PSW 3X16			
<CAPACITOR>			
C1502	1-126-943-11	ELECT 2200MF	20% 25V
C1503	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1504	1-126-943-11	ELECT 2200MF	20% 25V
C1505	1-136-177-00	FILM 1MF	5% 50V
C1506	1-102-228-00	CERAMIC 470PF	10% 500V
C1507	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1508	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1509	1-126-968-11	ELECT 100MF	20% 50V
C1510	1-137-401-11	FILM 0.22MF	10% 100V
C1511	1-137-423-11	FILM 0.15MF	10% 100V
C1512	1-137-423-11	FILM 0.15MF	10% 100V
C1513	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
C1514	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C1515	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C1516	1-136-177-00	FILM 1MF	5% 50V
C1517	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C1551	1-126-964-11	ELECT 10MF	20% 50V
C1603	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1604	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1605	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1606	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1607	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1608	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1611	1-126-968-11	ELECT 100MF	20% 50V
C1612	1-104-665-11	ELECT 100MF	20% 25V

REF. NO.	PART NO.	DESCRIPTION	REMARK
C1613	1-126-968-11	ELECT 100MF	20% 50V
C1615	1-104-665-11	ELECT 100MF	20% 25V
C1617	1-126-941-11	ELECT 470MF	20% 25V
C1619	1-104-665-11	ELECT 100MF	20% 25V
C1620	1-126-941-11	ELECT 470MF	20% 25V
C1622	1-104-665-11	ELECT 100MF	20% 25V
C1701	1-126-935-11	ELECT 470MF	20% 16V
C1702	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1703	1-163-099-00	CERAMIC CHIP 18PF	5% 50V
C1704	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C1705	1-163-099-00	CERAMIC CHIP 18PF	5% 50V
C1709	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C1723	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1724	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1801	1-124-903-11	ELECT 1MF	20% 50V
C1802	1-126-964-11	ELECT 10MF	20% 50V
C1803	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1805	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1806	1-163-127-00	CERAMIC CHIP 270PF	5% 50V
C1807	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1808	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1809	1-104-661-91	ELECT 330MF	20% 16V
C1810	1-104-661-91	ELECT 330MF	20% 16V
C1811	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1812	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1813	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V
C1814	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1816	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1817	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1818	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1819	1-126-933-11	ELECT 100MF	20% 16V
C1820	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
C1821	1-124-902-00	ELECT 0.47MF	20% 50V
C1822	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
C1823	1-124-903-11	ELECT 1MF	20% 50V
C1824	1-124-903-11	ELECT 1MF	20% 50V
C1825	1-126-967-11	ELECT 47MF	20% 50V
C1826	1-126-967-11	ELECT 47MF	20% 50V
C1827	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1828	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1829	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1830	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1831	1-104-661-91	ELECT 330MF	20% 16V
C1832	1-104-661-91	ELECT 330MF	20% 16V
C1833	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1834	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1835	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1836	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1837	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
C1838	1-126-968-11	ELECT 100MF	20% 50V
C1839	1-126-968-11	ELECT 100MF	20% 50V
C1840	1-124-903-11	ELECT 1MF	20% 50V
C1841	1-126-967-11	ELECT 47MF	20% 50V
C1842	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1843	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1844	1-126-967-11	ELECT 47MF	20% 50V
C1845	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1846	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1847	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1848	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1849	1-126-968-11	ELECT 100MF	20% 50V
C1850	1-126-968-11	ELECT 100MF	20% 50V
C1851	1-137-399-11	FILM 0.1MF	5% 50V
C1852	1-126-968-11	ELECT 100MF	20% 50V
C1853	1-137-378-11	FILM 0.22MF	5% 50V
C1854	1-126-963-11	ELECT 4.7MF	20% 50V
C1855	1-124-903-11	ELECT 1MF	20% 50V
C1856	1-104-665-11	ELECT 100MF	20% 25V
C1857	1-126-968-11	ELECT 100MF	20% 50V



**D**

Les composants identifiés par  
une trame et une marque Δ  
sont critiques pour la sécurité.  
Ne les remplacer que par une  
pièce portant le numéro spécifié.

The components identified by  
shading and mark Δ are critical  
for safety.  
Replace only with part number  
specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
C1858	1-163-809-11	CERAMIC CHIP 0.047MF 10%	25V
C1859	1-163-809-11	CERAMIC CHIP 0.047MF 10%	25V
C1860	1-163-809-11	CERAMIC CHIP 0.047MF 10%	25V
C1861	1-126-968-11	ELECT 100MF 20%	50V
C1862	1-124-903-11	ELECT 1MF 20%	50V
C1863	1-136-173-00	FILM 0.47MF 5%	50V
C1864	1-124-903-11	ELECT 1MF 20%	50V
C1865	1-124-903-11	ELECT 1MF 20%	50V
C1866	1-126-967-11	ELECT 47MF 20%	50V
<CHIP CONDUCTOR>			
CJ1	1-216-295-91	CONDUCTOR, CHIP	
CJ2	1-216-295-91	CONDUCTOR, CHIP	
CJ3	1-216-295-91	CONDUCTOR, CHIP	
CJ4	1-216-295-91	CONDUCTOR, CHIP	
CJ5	1-216-295-91	CONDUCTOR, CHIP	
CJ6	1-216-295-91	CONDUCTOR, CHIP	
CJ7	1-216-295-91	CONDUCTOR, CHIP	
CJ8	1-216-295-91	CONDUCTOR, CHIP	
CJ9	1-216-295-91	CONDUCTOR, CHIP	
CJ10	1-216-295-91	CONDUCTOR, CHIP	
CJ11	1-216-295-91	CONDUCTOR, CHIP	
CJ12	1-216-295-91	CONDUCTOR, CHIP	
CJ13	1-216-295-91	CONDUCTOR, CHIP	
CJ14	1-216-295-91	CONDUCTOR, CHIP	
CJ15	1-216-295-91	CONDUCTOR, CHIP	
CJ16	1-216-295-91	CONDUCTOR, CHIP	
CJ17	1-216-295-91	CONDUCTOR, CHIP	
CJ18	1-216-295-91	CONDUCTOR, CHIP	
CJ19	1-216-295-91	CONDUCTOR, CHIP	
CJ20	1-216-295-91	CONDUCTOR, CHIP	
CJ21	1-216-295-91	CONDUCTOR, CHIP	
CJ22	1-216-295-91	CONDUCTOR, CHIP	
CJ23	1-216-295-91	CONDUCTOR, CHIP	
CJ24	1-216-295-91	CONDUCTOR, CHIP	
CJ25	1-216-295-91	CONDUCTOR, CHIP	
CJ26	1-216-295-91	CONDUCTOR, CHIP	
CJ27	1-216-295-91	CONDUCTOR, CHIP	
CJ28	1-216-295-91	CONDUCTOR, CHIP	
CJ29	1-216-295-91	CONDUCTOR, CHIP	
CJ30	1-216-295-91	CONDUCTOR, CHIP	
CJ31	1-216-295-91	CONDUCTOR, CHIP	
CJ32	1-216-295-91	CONDUCTOR, CHIP	
CJ33	1-216-295-91	CONDUCTOR, CHIP	
CJ34	1-216-295-91	CONDUCTOR, CHIP	
CJ35	1-216-295-91	CONDUCTOR, CHIP	
CJ36	1-216-295-91	CONDUCTOR, CHIP	
CJ37	1-216-295-91	CONDUCTOR, CHIP	
CJ38	1-216-295-91	CONDUCTOR, CHIP	
CJ39	1-216-295-91	CONDUCTOR, CHIP	
CJ40	1-216-295-91	CONDUCTOR, CHIP	
CJ42	1-216-295-91	CONDUCTOR, CHIP	
CJ43	1-216-295-91	CONDUCTOR, CHIP	
CJ44	1-216-295-91	CONDUCTOR, CHIP	
CJ45	1-216-295-91	CONDUCTOR, CHIP	
CJ46	1-216-295-91	CONDUCTOR, CHIP	
CJ47	1-216-295-91	CONDUCTOR, CHIP	
CJ48	1-216-295-91	CONDUCTOR, CHIP	
CJ49	1-216-295-91	CONDUCTOR, CHIP	
CJ50	1-216-295-91	CONDUCTOR, CHIP	
CJ51	1-216-295-91	CONDUCTOR, CHIP	
CJ52	1-216-295-91	CONDUCTOR, CHIP	
CJ53	1-216-295-91	CONDUCTOR, CHIP	
CJ54	1-216-295-91	CONDUCTOR, CHIP	
CJ56	1-216-295-91	CONDUCTOR, CHIP	
CJ57	1-216-295-91	CONDUCTOR, CHIP	
CJ58	1-216-295-91	CONDUCTOR, CHIP	

REF. NO.	PART NO.	DESCRIPTION	REMARK
CJ59	1-216-295-91	CONDUCTOR, CHIP	
CJ60	1-216-295-91	CONDUCTOR, CHIP	
CJ62	1-216-295-91	CONDUCTOR, CHIP	
CJ63	1-216-295-91	CONDUCTOR, CHIP	
<CONNECTOR>			
CN1509	*1-564-506-11	PLUG, CONNECTOR 3P	
CN1513	*1-564-506-11	PLUG, CONNECTOR 3P	
CN1612	*1-564-507-11	PLUG, CONNECTOR 4P	
CN1642	*1-564-507-11	PLUG, CONNECTOR 4P	
CN1672	*1-564-507-11	PLUG, CONNECTOR 4P	
CN1716	*1-564-507-11	PLUG, CONNECTOR 4P	
CN1756	*1-564-508-11	PLUG, CONNECTOR 5P	
CN1757	*1-564-516-11	PLUG, CONNECTOR 13P	
<DIODE>			
D1501	8-719-908-03	DIODE GP08D	
D1502	8-719-109-89	DIODE RD5.6ESB2	
D1503	8-719-971-20	DIODE ERC38-06	
D1505	8-719-109-89	DIODE RD5.6ESB2	
D1551	8-719-983-14	DIODE MTZJ-T-77-3.9	
D1552	8-719-991-33	DIODE 1SS133T-77	
D1601	8-719-908-03	DIODE GP08D	
D1602	8-719-908-03	DIODE GP08D	
D1603	8-719-908-03	DIODE GP08D	
D1604	8-719-908-03	DIODE GP08D	
D1803	8-719-991-33	DIODE 1SS133T-77	
D1812	8-719-991-33	DIODE 1SS133T-77	
D1814	8-719-991-33	DIODE 1SS133T-77	
D1825	8-719-991-33	DIODE 1SS133T-77	
D1826	8-719-991-33	DIODE 1SS133T-77	
D1827	8-719-982-03	DIODE MTZJ-3.6A	
D1931	8-719-924-16	DIODE MTZJ-T-77-24	
D1932	8-719-924-16	DIODE MTZJ-T-77-24	
D1934	8-719-924-16	DIODE MTZJ-T-77-24	
D1935	8-719-924-16	DIODE MTZJ-T-77-24	
D1936	8-719-924-16	DIODE MTZJ-T-77-24	
D1937	8-719-924-16	DIODE MTZJ-T-77-24	
D1942	8-719-924-16	DIODE MTZJ-T-77-24	
D1945	8-719-924-16	DIODE MTZJ-T-77-24	
D1946	8-719-924-16	DIODE MTZJ-T-77-24	
D1947	8-719-924-16	DIODE MTZJ-T-77-24	
D1948	8-719-921-86	DIODE MTZJ-13	
D1949	8-719-924-16	DIODE MTZJ-T-77-24	
D1951	8-719-921-86	DIODE MTZJ-13	
D1953	8-719-921-86	DIODE MTZJ-13	
D1954	8-719-921-86	DIODE MTZJ-13	
<FUSE>			
F1601	Δ 1-532-745-11	FUSE, GLASS TUBE 3.15A/125V	
	1-533-223-11	CLIP, FUSE : F1601	
F1602	Δ 1-532-745-11	FUSE, GLASS TUBE 3.15A/125V	
	1-533-223-11	CLIP, FUSE : F1602	
<IC>			
IC1501	8-759-192-71	IC STV9379	
IC1601	8-749-010-88	IC STK392-010	
IC1602	8-749-010-88	IC STK392-010	
IC1701	8-752-861-57	IC CXP85112B-613S	
IC1702	8-759-041-54	IC MN1382S	
IC1801	8-759-327-52	IC PM0002B	
IC1802	8-759-327-51	IC PA0053B	
IC1803	8-759-012-67	IC MC7905CT	
IC1804	8-759-231-53	IC TA7805S	
IC1805	8-759-327-52	IC PM0002B	

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

D

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
IC1806	8-759-327-51	IC PA0053B		R1613	1-214-673-00	METAL 4.7	1% 1/4W
IC1807	8-759-929-65	IC LM7912CT		R1615	1-214-673-00	METAL 4.7	1% 1/4W
IC1808	8-759-279-76	IC MCT7812CT		R1616	1-214-673-00	METAL 4.7	1% 1/4W
IC1809	8-759-327-52	IC PM0002B		R1618	1-214-673-00	METAL 4.7	1% 1/4W
IC1931	8-759-711-28	IC NJM2058D					
IC1932	8-759-711-28	IC NJM2058D		R1619	1-214-673-00	METAL 4.7	1% 1/4W
<COIL>				R1620	1-214-673-00	METAL 4.7	1% 1/4W
L1501	1-412-533-21	INDUCTOR 47UH		R1621	1-214-673-00	METAL 4.7	1% 1/4W
L1502	1-412-533-21	INDUCTOR 47UH		R1622	1-214-673-00	METAL 4.7	1% 1/4W
L1503	1-412-524-11	INDUCTOR 8.2UH		R1623	1-214-729-00	METAL 1K	1% 1/4W
L1515	1-410-470-11	INDUCTOR 10UH					
L1516	1-410-482-31	INDUCTOR 100UH		R1624	1-214-729-00	METAL 1K	1% 1/4W
L1701	1-410-470-11	INDUCTOR 10UH		R1625	1-214-673-00	METAL 4.7	1% 1/4W
L1801	1-406-975-21	COIL, CHOKE 47UH		R1626	1-214-673-00	METAL 4.7	1% 1/4W
L1802	1-406-975-21	COIL, CHOKE 47UH		R1627	1-214-673-00	METAL 4.7	1% 1/4W
<TRANSISTOR>				R1628	1-214-673-00	METAL 4.7	1% 1/4W
Q1501	8-729-422-27	TRANSISTOR 2SD601A-Q		R1629	1-214-673-00	METAL 4.7	1% 1/4W
Q1502	8-729-422-27	TRANSISTOR 2SD601A-Q		R1630	1-214-673-00	METAL 4.7	1% 1/4W
Q1551	8-729-216-22	TRANSISTOR 2SA1162-G		R1631	1-214-729-00	METAL 1K	1% 1/4W
Q1552	8-729-422-27	TRANSISTOR 2SD601A-Q		R1632	1-214-673-00	METAL 4.7	1% 1/4W
Q1701	8-729-422-27	TRANSISTOR 2SD601A-Q		R1633	1-214-673-00	METAL 4.7	1% 1/4W
Q1801	8-729-422-27	TRANSISTOR 2SD601A-Q					
Q1802	8-729-216-22	TRANSISTOR 2SA1162-G		R1634	1-214-729-00	METAL 1K	1% 1/4W
Q1803	8-729-029-86	TRANSISTOR DTC124ESA		R1635	1-214-673-00	METAL 4.7	1% 1/4W
Q1804	8-729-422-27	TRANSISTOR 2SD601A-Q		R1636	1-214-673-00	METAL 4.7	1% 1/4W
Q1805	8-729-029-86	TRANSISTOR DTC124ESA		R1637	1-214-673-00	METAL 4.7	1% 1/4W
<RESISTOR>				R1638	1-214-673-00	METAL 4.7	1% 1/4W
R1501	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1639	1-214-673-00	METAL 4.7	1% 1/4W
R1502	1-208-814-11	METAL CHIP 22K	0.50% 1/10W	R1640	1-214-673-00	METAL 4.7	1% 1/4W
R1504	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R1641	1-214-673-00	METAL 4.7	1% 1/4W
R1505	1-216-085-00	METAL GLAZE 33K	5% 1/10W	R1642	1-214-673-00	METAL 4.7	1% 1/4W
R1506	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1717	1-216-033-00	METAL GLAZE 220	5% 1/10W
R1507	1-208-814-11	METAL CHIP 22K	0.50% 1/10W	R1721	1-216-033-00	METAL GLAZE 220	5% 1/10W
R1508	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R1737	1-216-033-00	METAL GLAZE 220	5% 1/10W
R1509	$\Delta$ 1-249-383-91	CARBON 1.5	5% 1/4W F	R1740	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1510	1-214-671-11	METAL 3.9	1% 1/4W	R1748	1-216-033-00	METAL GLAZE 220	5% 1/10W
R1511	1-214-671-11	METAL 3.9	1% 1/4W	R1749	1-216-295-91	CONDUCTOR, CHIP	
R1512	1-215-912-11	METAL OXIDE 150	5% 3W F	R1751	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R1513	1-214-671-11	METAL 3.9	1% 1/4W	R1752	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1514	1-216-632-11	METAL CHIP 160	0.50% 1/10W	R1753	1-216-295-91	CONDUCTOR, CHIP	
R1515	1-216-639-11	METAL CHIP 330	0.50% 1/10W	R1760	1-216-295-91	CONDUCTOR, CHIP	
R1516	1-214-671-11	METAL 3.9	1% 1/4W	R1788	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1517	1-216-647-11	METAL CHIP 680	0.50% 1/10W				
R1518	1-216-665-11	METAL CHIP 3.9K	0.50% 1/10W	R1801	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1519	$\Delta$ 1-249-385-91	CARBON 2.2	5% 1/4W F	R1802	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1520	$\Delta$ 1-249-385-91	CARBON 2.2	5% 1/4W F	R1803	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1521	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1804	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R1522	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1805	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W
R1523	1-216-033-00	METAL GLAZE 220	5% 1/10W				
R1551	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R1806	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R1552	1-216-063-91	METAL GLAZE 3.9K	5% 1/10W	R1807	1-216-075-00	METAL GLAZE 12K	5% 1/10W
R1553	1-216-077-00	METAL GLAZE 15K	5% 1/10W	R1808	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1554	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1809	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R1559	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1810	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R1562	1-216-025-91	METAL GLAZE 100	5% 1/10W				
R1603	1-216-663-11	METAL CHIP 3.3K	0.50% 1/10W	R1811	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R1604	1-216-663-11	METAL CHIP 3.3K	0.50% 1/10W	R1812	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R1605	1-216-663-11	METAL CHIP 3.3K	0.50% 1/10W	R1813	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R1606	1-216-663-11	METAL CHIP 3.3K	0.50% 1/10W	R1814	1-216-699-11	METAL CHIP 100K	0.50% 1/10W
R1607	1-216-663-11	METAL CHIP 3.3K	0.50% 1/10W	R1815	1-216-697-91	METAL CHIP 82K	0.50% 1/10W
R1608	1-216-663-11	METAL CHIP 3.3K	0.50% 1/10W				
R1610	1-214-729-00	METAL 1K	1% 1/4W	R1816	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R1612	1-214-729-00	METAL 1K	1% 1/4W	R1817	1-216-033-00	METAL GLAZE 220	5% 1/10W
				R1818	1-216-025-91	METAL GLAZE 100	5% 1/10W
				R1819	1-216-025-91	METAL GLAZE 100	5% 1/10W
				R1820	1-216-025-91	METAL GLAZE 100	5% 1/10W
				R1821	1-216-097-91	METAL GLAZE 100K	5% 1/10W
				R1823	1-208-811-11	METAL CHIP 16K	0.50% 1/10W
				R1824	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
				R1825	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
				R1826	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
				R1827	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
				R1828	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
				R1829	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
				R1830	1-216-025-91	METAL GLAZE 100	5% 1/10W
				R1831	1-216-049-91	METAL GLAZE 1K	5% 1/10W



Les composants identifiés par  
une trame et une marque Δ  
sont critiques pour la sécurité.  
Ne les remplacer que par une  
pièce portant le numéro spécifié.

The components identified by  
shading and mark Δ are critical  
for safety.  
Replace only with part number  
specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R1832	1-216-677-11	METAL CHIP 12K	0.50% 1/10W	R1903	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1833	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1904	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1834	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1905	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R1835	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1907	1-208-810-11	METAL CHIP 15K	0.50% 1/10W
R1836	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R1908	1-208-814-11	METAL CHIP 22K	0.50% 1/10W
R1837	1-208-806-11	METAL CHIP 10K	0.50% 1/10W	R1909	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1838	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W	R1910	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
R1839	1-216-031-00	METAL GLAZE 180	5% 1/10W	R1911	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
R1840	1-208-806-11	METAL CHIP 10K	0.50% 1/10W	R1912	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
R1841	1-208-806-11	METAL CHIP 10K	0.50% 1/10W	R1913	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
R1842	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1914	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
R1843	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W	R1915	1-216-685-11	METAL CHIP 27K	0.50% 1/10W
R1844	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1916	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1845	1-216-077-00	METAL GLAZE 15K	5% 1/10W	R1917	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1846	1-216-125-00	METAL GLAZE 1.5M	5% 1/10W	R1918	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W
R1847	1-208-806-11	METAL CHIP 10K	0.50% 1/10W	R1919	1-208-822-11	METAL CHIP 47K	0.50% 1/10W
R1848	1-216-077-00	METAL GLAZE 15K	5% 1/10W	R1920	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W
R1849	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W	R1923	1-216-677-11	METAL CHIP 12K	0.50% 1/10W
R1850	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1925	1-216-031-00	METAL GLAZE 180	5% 1/10W
R1851	1-216-043-91	METAL GLAZE 560	5% 1/10W	R1926	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1852	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1927	1-216-125-00	METAL GLAZE 1.5M	5% 1/10W
R1853	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R1928	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1854	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1931	1-216-698-11	METAL CHIP 91K	0.50% 1/10W
R1855	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1935	1-218-766-11	METAL CHIP 390K	0.50% 1/10W
R1856	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1937	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1857	1-216-033-00	METAL GLAZE 220	5% 1/10W	R1938	1-208-810-11	METAL CHIP 15K	0.50% 1/10W
R1858	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1940	1-208-812-11	METAL CHIP 18K	0.50% 1/10W
R1859	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1941	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1860	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1942	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1861	1-216-473-11	METAL OXIDE 56	5% 3W F	R1943	1-216-699-11	METAL CHIP 100K	0.50% 1/10W
R1862	1-216-473-11	METAL OXIDE 56	5% 3W F	R1944	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1863	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1947	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1864	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1948	1-216-093-00	METAL GLAZE 68K	5% 1/10W
R1865	1-216-473-11	METAL OXIDE 56	5% 3W F	R1949	1-216-659-11	METAL CHIP 2.2K	0.50% 1/10W
R1866	1-216-473-11	METAL OXIDE 56	5% 3W F	R1950	1-216-659-11	METAL CHIP 2.2K	0.50% 1/10W
R1868	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1951	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1869	1-216-685-11	METAL CHIP 27K	0.50% 1/10W	R1952	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1870	1-216-685-11	METAL CHIP 27K	0.50% 1/10W	R1954	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1871	1-216-685-11	METAL CHIP 27K	0.50% 1/10W	R1955	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1872	1-216-685-11	METAL CHIP 27K	0.50% 1/10W	R1956	1-208-800-11	METAL CHIP 5.6K	0.50% 1/10W
R1873	1-216-685-11	METAL CHIP 27K	0.50% 1/10W	R1957	1-208-824-11	METAL CHIP 56K	0.50% 1/10W
R1874	1-216-685-11	METAL CHIP 27K	0.50% 1/10W	R1958	1-208-800-11	METAL CHIP 5.6K	0.50% 1/10W
R1875	1-208-824-11	METAL CHIP 56K	0.50% 1/10W	R1959	1-208-824-11	METAL CHIP 56K	0.50% 1/10W
R1876	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1960	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1877	1-208-810-11	METAL CHIP 15K	0.50% 1/10W	R1961	1-208-806-11	METAL CHIP 10K	0.50% 1/10W
R1878	1-208-806-11	METAL CHIP 10K	0.50% 1/10W	R1962	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R1879	1-216-685-11	METAL CHIP 27K	0.50% 1/10W	R1963	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1880	1-218-768-11	METAL CHIP 470K	0.50% 1/10W	R1964	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1881	1-216-295-91	CONDUCTOR, CHIP		R1965	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1883	1-216-677-11	METAL CHIP 12K	0.50% 1/10W	R1966	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1884	1-208-806-11	METAL CHIP 10K	0.50% 1/10W	R1967	1-216-071-00	METAL GLAZE 8.2K	5% 1/10W
R1885	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1970	1-208-774-11	METAL CHIP 470	0.50% 1/10W
R1886	1-216-031-00	METAL GLAZE 180	5% 1/10W	R1971	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W
R1887	1-208-806-11	METAL CHIP 10K	0.50% 1/10W	R1972	1-216-111-91	METAL GLAZE 390K	5% 1/10W
R1888	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W	R1981	1-216-473-11	METAL OXIDE 56	5% 3W F
R1889	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W	R1982	1-216-473-11	METAL OXIDE 56	5% 3W F
R1890	1-216-125-00	METAL GLAZE 1.5M	5% 1/10W	R1983	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R1891	1-208-806-11	METAL CHIP 10K	0.50% 1/10W	R1984	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R1892	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W	R1985	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1893	1-216-097-91	METAL GLAZE 100K	5% 1/10W				
R1894	Δ 1-249-389-91	CARBON 4.7	5% 1/4W F			<THERMISTOR>	
R1895	1-216-043-91	METAL GLAZE 560	5% 1/10W	TH1501	1-807-925-11	THERMISTOR	
R1896	Δ 1-249-389-91	CARBON 4.7	5% 1/4W F	TH1801	1-808-269-11	THERMISTOR	
R1897	1-216-097-91	METAL GLAZE 100K	5% 1/10W			<CRYSTAL>	
R1898	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	X1701	1-579-917-11	VIBRATOR, CRYSTAL	
R1899	1-216-097-91	METAL GLAZE 100K	5% 1/10W				
R1900	1-216-033-00	METAL GLAZE 220	5% 1/10W				
R1901	1-216-025-91	METAL GLAZE 100	5% 1/10W				
R1902	1-216-025-91	METAL GLAZE 100	5% 1/10W				



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
*****				R1312	1-247-804-11	CARBON 75 5%	1/4W
* A-1372-111-A HB BOARD, COMPLETE (KP-46V35/53V35)				R1314	1-247-807-31	CARBON 100 5%	1/4W (KP-61V35)
*****				<SWITCH>			
<CAPACITOR>				S1301	1-571-731-11	SWITCH, TACTIL	
C1351	1-124-261-00	ELECT 10MF 20% 50V		S1302	1-571-731-11	SWITCH, TACTIL	
<CONNECTOR>				S1303	1-571-731-11	SWITCH, TACTIL	
CN1389	* 1-564-518-11	PLUG, CONNECTOR 3P		S1304	1-571-731-11	SWITCH, TACTIL	
<IC>				S1305	1-571-731-11	SWITCH, TACTIL	
IC1351	8-747-905-11	RAY CATCHER ELEMENT SBX1790-51		S1306	1-571-731-11	SWITCH, TACTIL	
<RESISTOR>				S1307	1-571-731-11	SWITCH, TACTIL	
R1352	1-247-807-31	CARBON 100 5% 1/4W		*****			
*****				* A-1373-559-A U BOARD, COMPLETE			
*****				*****			
* A-1372-099-A HA BOARD, COMPLETE (KP-61V35)				<CAPACITOR>			
*****				C1101	1-126-965-11	ELECT 22MF 20% 50V	
* A-1372-112-A HA BOARD, COMPLETE (KP-46V35/53V35)				C1102	1-124-903-11	ELECT 1MF 20% 50V	
*****				C1103	1-124-903-11	ELECT 1MF 20% 50V	
<CAPACITOR>				C1104	1-163-031-11	CERAMIC CHIP 0.01MF 50V	
C1301	1-126-964-11	ELECT 10MF 20% 50V		C1105	1-126-965-11	ELECT 22MF 20% 50V	
C1304	1-126-964-11	ELECT 10MF 20% 50V (KP-61V35)		C1106	1-126-965-11	ELECT 22MF 20% 50V	
<CONNECTOR>				C1107	1-124-903-11	ELECT 1MF 20% 50V	
CN1346	1-564-524-11	PLUG, CONNECTOR 9P		C1108	1-124-903-11	ELECT 1MF 20% 50V	
CN1347	* 1-564-521-11	PLUG, CONNECTOR 6P		C1109	1-126-965-11	ELECT 22MF 20% 50V	
CN1349	* 1-564-518-11	PLUG, CONNECTOR 3P (KP-46V35/53V35)		C1110	1-124-903-11	ELECT 1MF 20% 50V	
<DIODE>				C1111	1-124-903-11	ELECT 1MF 20% 50V	
D1304	8-719-053-43	DIODE SLR-325VCT31		C1121	1-126-935-11	ELECT 470MF 20% 16V	
D1305	8-719-053-43	DIODE SLR-325VCT31		C1122	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
<IC>				C1123	1-124-903-11	ELECT 1MF 20% 50V	
IC1301	8-741-780-51	IC SBX1780-51 (KP-61V35)		C1124	1-126-965-11	ELECT 22MF 20% 50V	
<JACK>				C1125	1-124-903-11	ELECT 1MF 20% 50V	
J1301	1-750-517-11	JACK BLOCK, PIN 3P		C1126	1-104-665-11	ELECT 100MF 20% 25V	
<RESISTOR>				C1127	1-104-663-11	ELECT 33MF 20% 25V	
R1302	1-249-416-11	CARBON 820 5% 1/4W		C1128	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
R1303	1-249-417-11	CARBON 1K 5% 1/4W		C1129	1-126-965-11	ELECT 22MF 20% 50V	
R1304	1-249-425-11	CARBON 4.7K 5% 1/4W		C1130	1-109-889-11	ELECT 1MF 20% 50V	
R1305	1-249-411-11	CARBON 330 5% 1/4W		C1131	1-109-889-11	ELECT 1MF 20% 50V	
R1306	1-249-411-11	CARBON 330 5% 1/4W		C1132	1-124-902-00	ELECT 0.47MF 20% 50V	
R1307	1-249-420-11	CARBON 1.8K 5% 1/4W		C1136	1-126-965-11	ELECT 22MF 20% 50V	
R1308	1-247-895-91	CARBON 470K 5% 1/4W		C1137	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
R1309	1-247-895-91	CARBON 470K 5% 1/4W		C1138	1-124-902-00	ELECT 0.47MF 20% 50V	
R1310	1-249-429-11	CARBON 10K 5% 1/4W		C1139	1-126-964-11	ELECT 10MF 20% 50V	
R1311	1-247-815-91	CARBON 220 5% 1/4W		C1145	1-128-499-11	ELECT 220MF 20% 16V	
<CHIP CONDUCTOR>				C1146	1-124-902-00	ELECT 0.47MF 20% 50V	
<CONNECTOR>				C1147	1-124-902-00	ELECT 0.47MF 20% 50V	
*****				C1148	1-124-902-00	ELECT 0.47MF 20% 50V	
*****				C1149	1-124-902-00	ELECT 0.47MF 20% 50V	
*****				C1150	1-128-499-11	ELECT 220MF 20% 16V	
*****				C1151	1-128-499-11	ELECT 220MF 20% 16V	
*****				C1152	1-128-499-11	ELECT 220MF 20% 16V	
*****				C1153	1-104-665-11	ELECT 100MF 20% 25V	
*****				CJ1102	1-216-295-91	CONDUCTOR, CHIP	
*****				<CONNECTOR>			
*****				CN1147	* 1-564-509-11	PLUG, CONNECTOR 6P	
*****				CN1150	1-573-300-21	CONNECTOR, BOARD TO BOARD 18P	
*****				CN1155	* 1-565-928-11	CONNECTOR (TUB) 30P	



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
CN1156	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P		Q1107	8-729-422-27	TRANSISTOR 2SD601A-Q	
CN1157	*1-564-515-11	PLUG, CONNECTOR 12P		Q1108	8-729-422-27	TRANSISTOR 2SD601A-Q	
CN1194	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P		Q1109	8-729-216-22	TRANSISTOR 2SA1162-G	
<DIODE>				Q1110	8-729-216-22	TRANSISTOR 2SA1162-G	
D1101	8-719-110-17	DIODE RD10ESB2		Q1111	8-729-216-22	TRANSISTOR 2SA1162-G	
D1102	8-719-110-17	DIODE RD10ESB2		Q1112	8-729-422-27	TRANSISTOR 2SD601A-Q	
D1103	8-719-110-17	DIODE RD10ESB2		Q1113	8-729-422-27	TRANSISTOR 2SD601A-Q	
D1104	8-719-110-17	DIODE RD10ESB2		Q1114	8-729-422-27	TRANSISTOR 2SD601A-Q	
D1105	8-719-110-17	DIODE RD10ESB2		Q1115	8-729-422-27	TRANSISTOR 2SD601A-Q	
D1106	8-719-110-17	DIODE RD10ESB2		<RESISTOR>			
D1107	8-719-110-17	DIODE RD10ESB2		R1101	1-216-065-00	METAL GLAZE 4.7K	5%
D1108	8-719-110-17	DIODE RD10ESB2		R1102	1-216-065-00	METAL GLAZE 4.7K	5%
D1109	8-719-110-17	DIODE RD10ESB2		R1103	1-247-804-11	CARBON 75	5%
D1111	8-719-110-17	DIODE RD10ESB2		R1104	1-216-065-00	METAL GLAZE 4.7K	5%
D1112	8-719-110-17	DIODE RD10ESB2		R1105	1-247-804-11	CARBON 75	5%
D1113	8-719-110-17	DIODE RD10ESB2		R1106	1-247-804-11	CARBON 75	5%
D1114	8-719-110-17	DIODE RD10ESB2		R1107	1-216-113-00	METAL GLAZE 470K	5%
D1115	8-719-110-17	DIODE RD10ESB2		R1108	1-216-065-00	METAL GLAZE 4.7K	5%
D1116	8-719-110-17	DIODE RD10ESB2		R1109	1-216-113-00	METAL GLAZE 470K	5%
D1117	8-719-110-17	DIODE RD10ESB2		R1110	1-216-065-00	METAL GLAZE 4.7K	5%
D1118	8-719-110-17	DIODE RD10ESB2		R1111	1-216-065-00	METAL GLAZE 4.7K	5%
D1120	8-719-110-17	DIODE RD10ESB2		R1112	1-216-065-00	METAL GLAZE 4.7K	5%
D1121	8-719-921-86	DIODE MTZJ-13		R1113	1-247-804-11	CARBON 75	5%
D1122	8-719-921-86	DIODE MTZJ-13		R1114	1-216-113-00	METAL GLAZE 470K	5%
D1123	8-719-921-86	DIODE MTZJ-13		R1115	1-216-113-00	METAL GLAZE 470K	5%
D1124	8-719-921-86	DIODE MTZJ-13		R1116	1-216-095-00	METAL GLAZE 82K	5%
D1125	8-719-981-99	DIODE MTZJ-T-77-3.3		R1117	1-216-095-00	METAL GLAZE 82K	5%
D1128	8-719-924-11	DIODE MTZJ-T-77-22		R1118	1-216-095-00	METAL GLAZE 82K	5%
D1129	8-719-924-11	DIODE MTZJ-T-77-22		R1119	1-216-025-91	METAL GLAZE 100	5%
D1130	8-719-924-11	DIODE MTZJ-T-77-22		R1120	1-216-025-91	METAL GLAZE 100	5%
D1131	8-719-924-11	DIODE MTZJ-T-77-22		R1127	1-216-041-00	METAL GLAZE 470	5%
D1132	8-719-110-17	DIODE RD10ESB2		R1129	1-216-041-00	METAL GLAZE 470	5%
D1133	8-719-110-17	DIODE RD10ESB2		R1130	1-216-067-00	METAL GLAZE 5.6K	5%
D1134	8-719-110-17	DIODE RD10ESB2		R1132	1-216-025-91	METAL GLAZE 100	5%
D1135	8-719-991-33	DIODE 1SS133T-77		R1133	1-216-067-00	METAL GLAZE 5.6K	5%
<IC>				R1134	1-216-065-00	METAL GLAZE 4.7K	5%
IC1101	8-752-068-46	IC CXA1855S		R1135	1-216-065-00	METAL GLAZE 4.7K	5%
IC1102	8-759-701-59	IC NJM78M09FA		R1137	1-216-025-91	METAL GLAZE 100	5%
IC1102	8-759-701-59	IC NJM78M09FA		R1138	1-216-065-00	METAL GLAZE 4.7K	5%
<JACK>				R1140	1-216-025-91	METAL GLAZE 100	5%
J1101	1-750-515-11	TERMINAL BLOCK, S 3P		R1141	1-216-041-00	METAL GLAZE 470	5%
J1102	1-750-517-11	JACK BLOCK, PIN 3P		R1142	1-216-025-91	METAL GLAZE 100	5%
J1103	1-750-545-11	JACK BLOCK, PIN 3P		R1145	1-216-051-00	METAL GLAZE 1.2K	5%
J1104	1-750-517-11	JACK BLOCK, PIN 3P		R1146	1-216-051-00	METAL GLAZE 1.2K	5%
J1105	1-750-516-11	JACK BLOCK, PIN 2P		R1149	1-216-041-00	METAL GLAZE 470	5%
J1108	1-563-760-11	JACK, MINIATURE (DIA. 3.5)		R1150	1-216-025-91	METAL GLAZE 100	5%
J1109	1-563-760-11	JACK, MINIATURE (DIA. 3.5)		R1151	1-216-025-91	METAL GLAZE 100	5%
J1110	1-563-760-11	JACK, MINIATURE (DIA. 3.5)		R1152	1-216-043-91	METAL GLAZE 560	5%
<COIL>				R1153	1-216-049-91	METAL GLAZE 1K	5%
L1101	1-410-476-11	INDUCTOR 33UH		R1154	1-216-041-00	METAL GLAZE 470	5%
L1104	1-410-473-11	INDUCTOR 18UH		R1155	1-216-049-91	METAL GLAZE 1K	5%
L1105	1-410-494-11	INDUCTOR 1mH		R1156	1-216-043-91	METAL GLAZE 560	5%
<TRANSISTOR>				R1157	1-216-045-00	METAL GLAZE 680	5%
Q1102	8-729-216-22	TRANSISTOR 2SA1162-G		R1158	1-216-043-91	METAL GLAZE 560	5%
Q1103	8-729-216-22	TRANSISTOR 2SA1162-G		R1159	1-216-045-00	METAL GLAZE 680	5%
Q1104	8-729-422-27	TRANSISTOR 2SD601A-Q		R1160	1-216-049-91	METAL GLAZE 1K	5%
Q1105	8-729-216-22	TRANSISTOR 2SA1162-G		R1161	1-216-041-00	METAL GLAZE 470	5%
Q1106	8-729-216-22	TRANSISTOR 2SA1162-G		R1162	1-216-041-00	METAL GLAZE 470	5%
				R1165	1-249-403-11	CARBON 68	5%
				R1166	1-216-113-00	METAL GLAZE 470K	5%
				R1167	1-216-113-00	METAL GLAZE 470K	5%
				R1168	1-216-113-00	METAL GLAZE 470K	5%
				R1169	1-216-025-91	METAL GLAZE 100	5%
				R1170	1-216-041-00	METAL GLAZE 470	5%
				R1171	1-216-041-00	METAL GLAZE 470	5%
				R1172	1-216-025-91	METAL GLAZE 100	5%
				R1173	1-216-025-91	METAL GLAZE 100	5%



REF. NO.	PART NO.	DESCRIPTION	REMARK
R1174	1-216-041-00	METAL GLAZE 470	5% 1/10W
R1175	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1176	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1178	1-216-041-00	METAL GLAZE 470	5% 1/10W
R1179	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1180	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1181	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R1182	1-216-113-00	METAL GLAZE 470K	5% 1/10W
R1183	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1184	1-216-113-00	METAL GLAZE 470K	5% 1/10W
R1185	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1186	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W
R1187	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W
R1188	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R1193	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1194	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1195	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1196	1-216-041-00	METAL GLAZE 470	5% 1/10W
R1197	1-216-041-00	METAL GLAZE 470	5% 1/10W
R1238	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1239	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1240	1-216-049-91	METAL GLAZE 1K	5% 1/10W

<TERMINAL BOARD>

TB1101 1-537-712-11 TERMINAL, PUSH

\*\*\*\*\*

\* A-1380-523-A K BOARD, COMPLETE  
\*\*\*\*\*

4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C1204	1-104-759-11	ELECT	470MF	20%	200V
C1205	1-104-759-11	ELECT	470MF	20%	200V
C1208	1-164-625-11	CERAMIC	680PF	10%	500V
C1209	1-164-625-11	CERAMIC	680PF	10%	500V
C1210	1-136-173-00	FILM	0.47MF	5%	50V
C1211	1-136-169-00	FILM	0.22MF	5%	50V
C1212	1-136-173-00	FILM	0.47MF	5%	50V
C1213	1-136-169-00	FILM	0.22MF	5%	50V
C1214	1-164-625-11	CERAMIC	680PF	10%	500V
C1215	1-129-719-00	FILM	0.027MF	5%	630V
C1230	1-136-153-00	FILM	0.01MF	5%	50V
C1231	1-128-548-11	ELECT	4700MF	20%	25V
C1232	1-128-548-11	ELECT	4700MF	20%	25V
C1233	1-136-153-00	FILM	0.01MF	5%	50V
C1234	1-126-965-11	ELECT	22MF	20%	50V
C1251	1-101-888-00	CERAMIC	68PF	5%	50V
C1252	1-102-971-00	CERAMIC	82PF	5%	50V
C1253	1-101-006-00	CERAMIC	0.047MF	5%	50V
C1254	1-102-127-00	CERAMIC	0.0068MF	10%	50V
C1255	1-102-978-00	CERAMIC	220PF	5%	50V
C1256	1-102-978-00	CERAMIC	220PF	5%	50V
C1257	1-104-665-11	ELECT	100MF	20%	25V
C1258	1-126-964-11	ELECT	10MF	20%	50V
C1259	1-124-903-11	ELECT	1MF	20%	50V
C1260	1-104-665-11	ELECT	100MF	20%	25V
C1261	1-104-665-11	ELECT	100MF	20%	25V
C1262	1-137-399-11	FILM	0.1MF	5%	50V
C1263	1-102-978-00	CERAMIC	220PF	5%	50V
C1266	1-101-002-00	CERAMIC	0.0022MF	5%	50V
C1267	1-126-967-11	ELECT	47MF	20%	16V
C1268	1-126-964-11	ELECT	10MF	20%	50V
C1270	1-126-964-11	ELECT	10MF	20%	50V

REF. NO.	PART NO.	DESCRIPTION	REMARK
C1271	1-126-964-11	ELECT	10MF 20% 50V
C1272	1-126-964-11	ELECT	10MF 20% 50V
C1273	1-126-933-11	ELECT	100MF 20% 16V
C1274	1-102-121-00	CERAMIC	0.0022MF 10% 50V
C1275	1-126-967-11	ELECT	47MF 20% 16V
C1276	1-126-967-11	ELECT	47MF 20% 16V
C1278	1-102-121-00	CERAMIC	0.0022MF 10% 50V
C1279	1-136-502-11	MYLAR	0.33MF 5% 50V
C1280	1-126-967-11	ELECT	47MF 20% 16V
C1281	1-124-903-11	ELECT	1MF 20% 50V
C1282	1-130-499-00	MYLAR	0.22MF 5% 50V
C1283	1-136-502-11	MYLAR	0.33MF 5% 50V
C1284	1-126-964-11	ELECT	10MF 20% 50V
C1285	1-130-493-00	MYLAR	0.068MF 5% 50V
C1286	1-136-165-00	FILM	0.1MF 5% 50V
C1287	1-126-963-11	ELECT	4.7MF 20% 50V
C1289	1-126-967-11	ELECT	47MF 20% 50V
C1290	1-128-550-11	ELECT	2200MF 20% 50V
C1291	1-128-550-11	ELECT	2200MF 20% 50V
C1292	1-126-964-11	ELECT	10MF 20% 50V
C1293	1-104-665-11	ELECT	100MF 20% 25V
C1294	1-126-965-11	ELECT	22MF 20% 50V
C1295	1-124-925-11	ELECT	2.2MF 20% 50V
C1296	1-126-964-11	ELECT	10MF 20% 50V
C1297	1-126-964-11	ELECT	10MF 20% 50V

<CONNECTOR>

CN1209 \* 1-564-507-11 PLUG, CONNECTOR 4P  
 CN1210 \* 1-573-963-11 PIN, CONNECTOR (PC BOARD) 3P  
 CN1230 1-695-915-11 TAB (CONTACT)  
 CN1270 \* 1-564-512-11 PLUG, CONNECTOR 9P  
 CN1271 \* 1-691-134-11 PIN, CONNECTOR (PC BOARD) 2P

<DIODE>

D1201	8-719-052-84	DIODE LN4SB60
D1205	8-719-991-33	DIODE 1SS133T-77
D1207	8-719-991-33	DIODE 1SS133T-77
D1209	8-719-991-33	DIODE 1SS133T-77
D1211	8-719-991-33	DIODE 1SS133T-77
D1214	8-719-160-81	DIODE RD27FB2
D1215	8-719-160-81	DIODE RD27FB2
D1230	8-719-988-31	DIODE D10SC6MR
D1231	8-719-510-09	DIODE D10SC6M
D1232	8-719-991-33	DIODE 1SS133T-77
D1233	8-719-991-33	DIODE 1SS133T-77
D1234	8-719-110-60	DIODE RD24ESB
D1235	8-719-921-80	DIODE MTZJ-11B
D1251	8-719-991-33	DIODE 1SS133T-77
D1252	8-719-991-33	DIODE 1SS133T-77
D1253	8-719-991-33	DIODE 1SS133T-77
D1260	8-719-991-33	DIODE 1SS133T-77
D1261	8-719-991-33	DIODE 1SS133T-77
D1270	8-719-991-33	DIODE 1SS133T-77
D1271	8-719-991-33	DIODE 1SS133T-77
D1272	8-719-991-33	DIODE 1SS133T-77
D1273	8-719-924-11	DIODE MTZJ-T-77-22
D1274	8-719-924-11	DIODE MTZJ-T-77-22
D1275	8-719-991-33	DIODE 1SS133T-77
D1276	8-719-991-33	DIODE 1SS133T-77
D1277	8-719-991-33	DIODE 1SS133T-77
D1278	8-719-991-33	DIODE 1SS133T-77

<IC>

IC1230 8-759-420-19 IC AN1431T  
 IC1270 8-759-135-80 IC uPC358C  
 IC1271 8-759-135-80 IC uPC358C



Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC1272	8-759-398-49	IC MM1124AD	
IC1273	8-759-135-80	IC uPC358C	
IC1274	8-759-072-99	IC TDA2052	
IC1275	8-759-905-71	IC NE571N	
<COIL>			
L1251	1-414-158-11	INDUCTOR 2.2UH	
L1252	1-414-158-11	INDUCTOR 2.2UH	
<TRANSISTOR>			
Q1201	8-729-019-49	TRANSISTOR 2SC4834M	
Q1202	8-729-019-49	TRANSISTOR 2SC4834M	
Q1230	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1231	8-729-230-45	TRANSISTOR 2SC2458-YGR	
Q1232	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1233	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1260	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1261	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1262	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1263	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1270	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1271	8-729-927-14	TRANSISTOR DTC323TS	
Q1272	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1273	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1274	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1275	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1277	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1278	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1279	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1280	8-729-119-76	TRANSISTOR 2SA1175-HFE	
<RESISTOR>			
R1204	1-247-891-00	CARBON 330K 5%	1/4W
R1205	1-247-891-00	CARBON 330K 5%	1/4W
R1206	$\Delta$ 1-202-933-61	FUSIBLE 0.1 10%	1/2W F
R1207	1-247-891-00	CARBON 330K 5%	1/4W
R1208	1-247-891-00	CARBON 330K 5%	1/4W
R1209	1-216-375-00	METAL OXIDE 3.3 5%	2W F
R1210	1-247-891-00	CARBON 330K 5%	1/4W
R1211	1-247-891-00	CARBON 330K 5%	1/4W
R1212	1-216-375-00	METAL OXIDE 3.3 5%	2W F
R1213	1-249-393-11	CARBON 10 5%	1/4W
R1215	1-249-393-11	CARBON 10 5%	1/4W
R1230	1-249-393-11	CARBON 10 5%	1/4W
R1231	1-247-807-31	CARBON 100 5%	1/4W
R1232	1-247-883-00	CARBON 150K 5%	1/4W
R1233	1-215-448-00	METAL 13K 1%	1/4W
R1234	1-249-417-11	CARBON 1K 5%	1/4W
R1235	1-215-428-00	METAL 2K 1%	1/4W
R1236	1-249-429-11	CARBON 10K 5%	1/4W
R1237	1-247-807-31	CARBON 100 5%	1/4W
R1238	1-249-429-11	CARBON 10K 5%	1/4W
R1239	1-249-421-11	CARBON 2.2K 5%	1/4W
R1240	1-215-888-00	METAL OXIDE 220 5%	2W F
R1241	1-249-429-11	CARBON 10K 5%	1/4W
R1242	1-249-425-11	CARBON 4.7K 5%	1/4W
R1243	1-249-429-11	CARBON 10K 5%	1/4W
R1244	1-249-425-11	CARBON 4.7K 5%	1/4W
R1245	1-211-761-11	FUSIBLE 0.1 10%	1/2W
R1248	1-211-761-11	FUSIBLE 0.1 10%	1/2W
R1250	1-249-437-11	CARBON 47K 5%	1/4W
R1252	1-249-429-11	CARBON 10K 5%	1/4W
R1254	1-249-437-11	CARBON 47K 5%	1/4W
R1255	1-249-437-11	CARBON 47K 5%	1/4W
R1256	1-249-437-11	CARBON 47K 5%	1/4W
R1257	1-247-887-00	CARBON 220K 5%	1/4W

REF. NO.	PART NO.	DESCRIPTION	REMARK
R1259	1-247-863-91	CARBON 22K 5%	1/4W
R1260	1-249-430-11	CARBON 12K 5%	1/4W
R1261	1-247-807-31	CARBON 100 5%	1/4W
R1262	1-249-417-11	CARBON 1K 5%	1/4W
R1263	1-249-429-11	CARBON 10K 5%	1/4W
R1264	1-249-417-11	CARBON 1K 5%	1/4W
R1265	1-249-429-11	CARBON 10K 5%	1/4W
R1266	1-249-429-11	CARBON 10K 5%	1/4W
R1267	1-249-429-11	CARBON 10K 5%	1/4W
R1268	1-247-863-91	CARBON 22K 5%	1/4W
R1269	1-249-417-11	CARBON 1K 5%	1/4W
R1270	1-249-425-11	CARBON 4.7K 5%	1/4W
R1271	1-249-425-11	CARBON 4.7K 5%	1/4W
R1272	1-249-429-11	CARBON 10K 5%	1/4W
R1273	1-249-429-11	CARBON 10K 5%	1/4W
R1275	1-249-429-11	CARBON 10K 5%	1/4W
R1276	1-249-429-11	CARBON 10K 5%	1/4W
R1277	1-249-429-11	CARBON 10K 5%	1/4W
R1279	1-249-437-11	CARBON 47K 5%	1/4W
R1280	1-249-416-11	CARBON 820 5%	1/4W
R1281	1-249-437-11	CARBON 47K 5%	1/4W
R1282	1-249-417-11	CARBON 1K 5%	1/4W
R1283	1-247-863-91	CARBON 22K 5%	1/4W
R1284	1-249-415-11	CARBON 680 5%	1/4W
R1285	1-249-431-11	CARBON 15K 5%	1/4W
R1286	1-249-421-11	CARBON 2.2K 5%	1/4W
R1287	1-249-431-11	CARBON 15K 5%	1/4W
R1288	1-249-431-11	CARBON 15K 5%	1/4W
R1289	1-249-429-11	CARBON 10K 5%	1/4W
R1290	1-216-357-00	METAL OXIDE 4.7 5%	1W F
R1291	1-247-863-91	CARBON 22K 5%	1/4W
R1292	1-249-429-11	CARBON 10K 5%	1/4W
R1293	1-247-863-91	CARBON 22K 5%	1/4W
R1294	1-249-441-11	CARBON 100K 5%	1/4W
R1295	1-247-863-91	CARBON 22K 5%	1/4W
R1296	1-249-415-11	CARBON 680 5%	1/4W
R1297	1-249-425-11	CARBON 4.7K 5%	1/4W
R1298	1-249-411-11	CARBON 330 5%	1/4W
R1299	1-249-429-11	CARBON 10K 5%	1/4W
R1358	1-249-429-11	CARBON 10K 5%	1/4W
R1360	1-249-441-11	CARBON 100K 5%	1/4W
R1361	1-247-887-00	CARBON 220K 5%	1/4W
R1362	1-249-437-11	CARBON 47K 5%	1/4W
R1363	1-249-429-11	CARBON 10K 5%	1/4W
R1364	1-259-880-11	CARBON 2.2M 5%	1/4W
R1365	1-249-441-11	CARBON 100K 5%	1/4W
R1366	1-249-432-11	CARBON 18K 5%	1/4W
R1367	1-249-425-11	CARBON 4.7K 5%	1/4W
R1368	1-249-410-11	CARBON 270 5%	1/4W
R1369	1-249-441-11	CARBON 100K 5%	1/4W
R1370	1-249-429-11	CARBON 10K 5%	1/4W
R1371	1-249-429-11	CARBON 10K 5%	1/4W
R1372	1-247-807-31	CARBON 100 5%	1/4W
R1373	1-249-413-11	CARBON 470 5%	1/4W
R1374	1-249-417-11	CARBON 1K 5%	1/4W
R1375	1-249-417-11	CARBON 1K 5%	1/4W
R1376	1-247-807-31	CARBON 100 5%	1/4W
R1377	1-249-417-11	CARBON 1K 5%	1/4W
R1378	1-249-417-11	CARBON 1K 5%	1/4W
R1379	1-249-427-11	CARBON 6.8K 5%	1/4W
R1380	1-249-427-11	CARBON 6.8K 5%	1/4W
R1381	1-249-429-11	CARBON 10K 5%	1/4W
R1382	1-249-429-11	CARBON 10K 5%	1/4W
R1383	1-249-429-11	CARBON 10K 5%	1/4W
<TRANSFORMER>			
T1202	$\Delta$ 1-429-289-11	TRANSFORMER CONVERTER (PIT)	



The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**K ZR ZG ZB**

REF. NO.	PART NO.	DESCRIPTION	REMARK
T1204	$\Delta$ 1-427-864-12	TRANSFORMER, CONVERTER (PRT)	

\*\*\*\*\*

\* A-1390-487-A ZR BOARD, COMPLETE  
\*\*\*\*\*

4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C1403	1-102-978-00	CERAMIC	220PF	5%	50V
C1404	1-107-638-11	ELECT	33MF	20%	160V
C1405	1-104-665-11	ELECT	100MF	20%	25V
C1406	1-107-370-11	FILM	0.1MF	10%	200V
C1407	1-104-665-11	ELECT	100MF	20%	25V

C1408	1-107-362-11	FILM	0.0047MF	10%	200V
C1409	1-107-667-11	ELECT	2.2MF	20%	160V
C1410	1-107-362-11	FILM	0.0047MF	10%	200V
C1411	1-137-364-11	FILM	0.001MF	5%	50V
C1412	1-137-364-11	FILM	0.001MF	5%	50V

C1413	1-161-830-00	CERAMIC	0.0047MF		500V
C1414	1-104-661-91	ELECT	330MF	20%	16V
C1415	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C1416	1-102-973-00	CERAMIC	100PF	5%	50V

<CONNECTOR>

CN1411	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P
CN1412	* 1-564-507-11	PLUG, CONNECTOR 4P
CN1413	* 1-564-506-11	PLUG, CONNECTOR 3P
CN1414	* 1-564-509-11	PLUG, CONNECTOR 6P
CN1415	* 1-564-510-11	PLUG, CONNECTOR 7P

CN1416 1-695-915-11 TAB (CONTACT)

<DIODE>

D1401	8-719-921-86	DIODE MTZJ-13
D1402	8-719-921-86	DIODE MTZJ-13

<TRANSISTOR>

Q1401	8-729-017-06	TRANSISTOR 2SC4793
Q1402	8-729-017-05	TRANSISTOR 2SA1837
Q1403	8-729-140-96	TRANSISTOR 2SD774-34

<RESISTOR>

R1401	1-249-414-11	CARBON	560	5%	1/4W
R1402	1-249-414-11	CARBON	560	5%	1/4W
R1405	1-249-417-11	CARBON	1K	5%	1/4W
R1406	1-216-479-11	METAL OXIDE	560	5%	3W F
R1407	1-249-400-11	CARBON	39	5%	1/4W F

R1408	1-249-384-11	CARBON	1.8	5%	1/4W F
R1409	1-249-384-11	CARBON	1.8	5%	1/4W F
R1410	1-247-734-11	CARBON	39	5%	1/2W F
R1411	1-249-417-11	CARBON	1K	5%	1/4W F
R1412	1-249-414-11	CARBON	560	5%	1/4W

R1413	1-249-432-11	CARBON	18K	5%	1/4W
R1414	1-249-432-11	CARBON	18K	5%	1/4W
R1415	1-249-414-11	CARBON	560	5%	1/4W F
R1416	1-216-451-11	METAL OXIDE	120	5%	2W F
R1417	1-216-475-11	METAL OXIDE	120	5%	3W F

R1418	1-249-377-11	CARBON	0.47	5%	1/4W F
R1419	1-247-815-91	CARBON	220	5%	1/4W
R1420	1-216-475-11	METAL OXIDE	120	5%	3W F
R1421	1-249-417-11	CARBON	1K	5%	1/4W

REF. NO.	PART NO.	DESCRIPTION	REMARK
*****			
	* A-1390-489-A	ZG BOARD, COMPLETE	*****

<CAPACITOR>

C1433	1-102-973-00	CERAMIC	100PF	5%	50V
-------	--------------	---------	-------	----	-----

<CONNECTOR>

CN1441	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P
CN1442	* 1-564-507-11	PLUG, CONNECTOR 4P
CN1443	* 1-564-506-11	PLUG, CONNECTOR 3P
CN1445	* 1-564-510-11	PLUG, CONNECTOR 7P

<RESISTOR>

R1431	1-249-414-11	CARBON	560	5%	1/4W
R1432	1-249-414-11	CARBON	560	5%	1/4W
R1435	1-216-475-11	METAL OXIDE	120	5%	3W F
R1436	1-216-475-11	METAL OXIDE	120	5%	3W F
R1437	1-249-417-11	CARBON	1K	5%	1/4W

\*\*\*\*\*

\* A-1390-491-A ZB BOARD, COMPLETE  
\*\*\*\*\*

<CONNECTOR>

CN1471	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P
CN1472	* 1-564-507-11	PLUG, CONNECTOR 4P
CN1473	* 1-564-506-11	PLUG, CONNECTOR 3P

<RESISTOR>

R1461	1-249-414-11	CARBON	560	5%	1/4W
R1462	1-249-414-11	CARBON	560	5%	1/4W
R1465	1-216-475-11	METAL OXIDE	120	5%	3W F
R1466	1-216-475-11	METAL OXIDE	120	5%	3W F

\*\*\*\*\*

MISCELLANEOUS  
\*\*\*\*\*

$\Delta$  1-223-925-11 RESISTOR ASSY (HIGH-VOLTAGE)

1-417-178-11 SELECTOR, ANTENNA (AS-2)

$\Delta$  1-452-790-11 NECK ASSY

$\Delta$  1-452-790-21 NECK ASSY

1-504-785-11 SPEAKER (10CM) (KP-61V35)

1-505-377-11 SPEAKER (13CM)

1-505-378-11 SPEAKER (10CM) (KV-46V35/53V35)

1-556-945-21 CABLE, P-P

\* 1-557-056-41 CABLE, P-P

$\Delta$  1-769-837-11 CORD, POWER (WITH NOISE FILTER)

(7.0A/125V)

$\Delta$  1-900-211-34 LEAD ASSY, HV

$\Delta$  8-451-463-11 DEFLECTION YOKE Y829PA2N(R),(G)

$\Delta$  8-451-463-21 DEFLECTION YOKE Y829PA2N2(B)

$\Delta$  8-598-955-10 BLOCK ASSY, HIGH-VOLTAGE

$\Delta$  8-736-075-05 PICTURE TUBE 07MAC2(G)

$\Delta$  8-736-076-15 PICTURE TUBE 07MAC2(B) (KP-46V35)

$\Delta$  8-736-076-25 PICTURE TUBE 07MAC3(B) (KP-53V35/61V35)

$\Delta$  8-736-077-15 PICTURE TUBE 07MAC2(R) (KP-46V35)

$\Delta$  8-736-077-25 PICTURE TUBE 07MAC3(R) (KP-53V35/61V35)

REF. NO.	PART NO.	DESCRIPTION	REMARK
	8-741-797-01	FILTER, DIGITAL COM SBX1797-01	

\*\*\*\*\*

**ACCESSORIES AND PACKING MATERIALS**

\*\*\*\*\*

3-701-627-00	BAG, POLYETHYLENE
3-856-609-11	MANUAL, INSTRUCTION
3-856-609-21	MANUAL, INSTRUCTION (Canadian model)
4-036-901-01	SCREW
* 4-037-674-01	BOARD, TOP (KP-46V35)
4-038-384-01	CATCHER, MAGNET
4-038-385-01	SPACER
4-039-009-02	CUSHION, GLASS
* 4-041-426-01	BAG, PROTECTION (KP-46V35/53V35)
* 4-042-463-01	SHEET, PROTECTION (KP-53V35/61V35)
* 4-047-553-01	INDIVIDUAL CARTON (KP-61V35)
* 4-047-554-01	TRAY (KP-61V35)
* 4-047-555-01	PLATE, TOP (KP-61V35)
* 4-047-556-01	BOARD, BOTTOM (KP-61V35)
* 4-047-557-01	CUSHION (UPPER) (ASSY) (KP-61V35)
* 4-047-558-01	CUSHION (LOWER) (ASSY) (KP-61V35)
* 4-047-559-01	CUSHION (LEFT UPPER) (KP-61V35)
* 4-047-560-01	CUSHION (RIGHT UPPER) (KP-61V35)
* 4-047-561-01	CUSHION (LEFT LOWER) (KP-61V35)
* 4-047-562-01	CUSHION (RIGHT LOWER) (KP-61V35)
* 4-047-603-01	CUSHION (UPPER) (ASSY) (KP-46V35)
* 4-047-604-01	CUSHION (LOWER) (ASSY) (KP-46V35)
* 4-047-606-01	TRAY (KP-46V35)
* 4-047-607-01	BOARD, BOTTOM (KP-46V35)
* 4-047-608-01	INDIVIDUAL CARTON (KP-46V35)
* 4-047-774-01	PLATE, TOP (KP-53V35)

REF. NO.	PART NO.	DESCRIPTION	REMARK
* 4-048-087-01	CUSHION (UPPER) (ASSY) (KP-53V35)		
* 4-048-088-01	CUSHION (LOWER) (ASSY) (KP-53V35)		
4-048-634-01	SHAFT		
4-048-790-01	GLASS (53), DOOR (KP-46V35/53V35)		

4-048-791-01	GLASS (61), DOOR (KP-61V35)
* 4-049-023-01	BOARD, BOTTOM (KP-53V35)
* 4-049-024-01	TRAY (KP-53V35)
* 4-049-031-01	INDIVIDUAL CARTON (KP-53V35)
* 4-049-193-01	BAG, POLYETHYLENE

* 4-049-276-01	SHEET, PROTECTION (KP-46V35)
* 4-049-508-01	CUSHION (FRONT) (ASSY) (KP-53V35)
* 4-049-922-01	BLOCK, FOAM (KP-61V35)
* 4-049-923-01	CUSHION (UPPER) (ASSY) (KP-46V35)
* 4-049-952-01	BAG, PROTECTION (KP-61V35)

7-682-576-04	SCREW +B 5X12
7-684-025-04	N 5, TYPE 2
7-685-661-79	SCREW +BVTP 4X12 TYPE2 IT-3
X-4033-663-1	DOOR ASSY, RACK (KP-61V35)
X-4033-667-1	DOOR (L) ASSY, RACK (KP-46V35/53V35)
X-4033-668-1	DOOR (R) ASSY, RACK (KP-46V35/53V35)

**REMOTE COMMANDER**

\*\*\*\*\*

8-917-534-90	REMOTE COMMANDER (RM-Y137//M)
4-978-977-01	POCKET, COVER (FOR RM-Y137)